

PERFORMANCE WORK STATEMENT
FOR
OPERATIONS AND MAINTENANCE OF FULL-SCALE AERIAL TARGETS
AT TYNDALL AFB FL AND HOLLOMAN AFB NM
AND
OPERATIONS AND MAINTENANCE OF SUBSCALE AERIAL TARGETS,
DRONE CONTROL, COMMUNICATIONS AND SCORING SYSTEMS
AND
THE AIRBORNE PLATFORM/TELEMETRY RELAY
AT
TYNDALL AFB FL

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Performance Work Statement

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SECTION A

DESCRIPTION OF SERVICES

1 INTRODUCTION

1.1 Mission. The 53d Weapons Evaluation Group (WEG) conducts air-to-air (A/A) and air-to-ground (A/G) Weapon System Evaluation Programs (WSEP) for force development and evaluation of all USAF fighters, bombers, A/A missiles, and conventional precision guided munitions (PGMs). The 53 WEG also provides range control and all USAF aerial target support for DoD users and conducts the worldwide USAF Air-to-Air Weapons Meet, William Tell.

1.2 Scope. The 53 WEG requires Contractor support to manage, operate and maintain aerial targets, scoring, drone control, range control, and associated instrumentation and communications systems. This support is mainly required at Tyndall AFB, Florida and Holloman AFB, New Mexico. At times support shall be provided at other locations. The nature of this work shall at times demand that the Contractor be capable of quick response to stringent deadlines.

Also, the nature of this program shall demand that the Contractor be capable of supporting changes to target, control, scoring, and other associated systems.

The required support falls into one of the following categories:

- a. Management, Operations and Maintenance of Full Scale Aerial Targets (FSAT)
- b. Management, Operations and Maintenance of Subscale Aerial Targets (SSAT)
- c. Management, Operations and Maintenance of Range Control Facility (RCF), Range Control System (RCS), and Gulf Range Drone Control System (GRDCS II)
- d. Management, Operations and Maintenance of Associated Radar, Video, Telemetry, and Communications Equipment

1.2.1 Expectations. The Contractor shall:

1.2.1.1 Provide proactive and flexible management control in the fulfillment of all assigned requirements.

1.2.1.2 Foster an atmosphere in which management goals are focused on not merely meeting, but exceeding, required performance standards and customer expectations.

1.2.1.3 Establish business approaches embodying sound financial management concepts, supply discipline, asset stewardship, flexibility, and best business practices.

1.2.1.4 Provide personnel who meet the education, training, and experience requirements listed herein, and quality resources, except those designated as Government furnished, to accomplish assigned requirements.

1.2.1.5 Develop, maintain, and analyze achievable metrics for assigned requirements and employ a process of continuous improvement. Provide metrics and other data pertinent to maintenance status of aerial targets, associated systems, and support equipment to the WEG for incorporation in daily/weekly maintenance meetings.

1.2.1.6 Support meetings, staff assistance visits, working groups, briefings, inspections, financial budgeting and reporting, and prepare, maintain, submit or make accessible correspondence, records, reports, and data associated with all work requirements.

1.2.1.7 Ensure timely and accurate updates of automated systems. Enforce a sound maintenance and repair program that supports extension of the useful life of facilities and equipment.

1.2.1.8 Ensure accountability for all Government furnished assets and all facilities, systems, and equipment assigned for management, maintenance or operations.

1.2.1.9 Safeguard Government records, sensitive equipment/software, information, and facilities to prevent unauthorized access or release.

1.2.1.10 Support operation tempo increases brought about by exercises, contingencies, disasters, or special events designated by the Commanders to include, but not limited to, Distinguished Visitor Tours, Staff Assistance Visits, and Change of Command Ceremonies.

1.2.1.11 Support Environmental Programs consistent with Federal state, and local laws.

1.2.1.12 Foreign Object Damage (FOD) Program. Develop and implement a FOD program IAW 21-101, paragraph 14.19. Enforce an effective and meaningful Foreign Object Damage (FOD) prevention program which reduces the FOD hazard to aerospace equipment and aircraft for all personnel working in, on, around, or traveling through areas near aircraft, aerospace ground equipment (AGE), engines, or components thereof.

1.2.1.13 Support disaster response exercises and real world events including community aid when authorized by the Government.

1.2.1.14 Report all material deficiencies in accordance with the Air Force Material Deficiency Reporting (MDR) System.

1.2.1.15 Cooperate fully with the Government in fulfilling its obligations under the Freedom of Information Act (FOIA) and the Privacy Act. Records that are determined to be totally releasable under FOIA and are defined as 'frequently asked for records' shall be made available.

1.2.1.16 Cooperate fully with the government in an effective mishap prevention program in flying and ground safety IAW the intent of AFI 91-202.

1.2.1.17 The Government may direct the Contractor to provide mission support in excess of the normal and surge efforts, provided the Government and the Contractor agree that such support is within the Contractor's on-site capability.

1.2.1.18 Research and order all parts, materials, and equipment required for the maintenance of the items specified in this contract. Research may include contacting original equipment

manufacturers or component vendors to verify that the replacement fulfills the form, fit, and function of the original. If an exact replacement is unavailable, or too expensive, the Contractor shall design and propose a modification that shall return the equipment to its full operational capability. The Government shall determine if replacement is too expensive and approve modification.

1.2.1.19 Maintain the equipment specified in the Government Furnished Property (GFP) list of this Performance Work Statement to OEM standards or to T.O. standards where they exist.

1.2.1.20 Dropped Object Prevention (DOP) Program. Adhere to and implement host wing's DOP Program IAW AFI 21-101.

1.2.1.21 Personal electronic or communication devices (e.g., cell phones, beepers, pagers, portable music/video players, electronic games) are prohibited on the flightline, munitions areas, hangars, and/ or other industrial work areas. This prohibition does not include common areas such as office areas, break or locker/ready rooms or senior management. Government equipment issued for the performance of official duties must be appropriately marked/identified and are exempt from this prohibition.

1.2.2 Program Management

1.2.2.1 The Contractor shall provide a contractor program manager (CPM) at TAFB, FL who shall be responsible for overall supervision and control of all Contractor services and personnel required by this PWS. The CPM shall designate, in writing, an alternate CPM to the Government if the CPM is to be absent for eight hours or more during normal duty days. After normal duty hours the CPM or designated alternate shall be available on-site within 30 minutes of contact. The CPM and alternate(s) must be able to read, write, speak, and understand English. For the purpose of this contract any guidance or directive referencing Maintenance Group Commander, or Operations Group Commander refers to CPM.

1.2.2.2 The Contractor shall provide management, planning, and direction to assure satisfactory system operation and maintenance. It shall be the responsibility of the Contractor to select personnel who are qualified to perform the required functions. Provide all top-level management, supervision, personnel, and services necessary for operations and maintenance of the aerial targets program, to include administration; computer, communications, and electronics support; logistics; operations; and security. Specific program management responsibilities include the following:

1.2.2.2.1 Ensure operations and maintenance are performed IAW the requirements of this PWS supplemented by the applicable Department of Defense (DOD), Air Force, or Air Force approved publications, specifications, and standards attached hereto or incorporated by reference. The Contractor shall implement management and control procedures that follow the concepts and standards as outlined in the directive publications referenced herein. These control procedures must afford early recognition of problem areas by the Contractor and shall ensure prompt resolution of those problems within the capabilities of the Contractor and scope of the contract. Problems affecting functional area mission accomplishment or Contractor performance shall be promptly reported to the FC, LG, GFR, PM/CQAE and/or CO, if the direct involvement by the CO is deemed necessary.

1.2.2.2.2 Use technical orders where applicable during all operations and maintenance of systems, subsystems, and Support Equipment (SE).

1.2.2.2.3 Identify, document, and recommend methods of process improvements and potential savings to the aerial targets program.

1.2.2.2.4 Aggressively pursue timely responsiveness to CO or Government program management requests.

1.2.2.2.5 Develop a quick-fix program to effectively cope with equipment failures during mission countdown.

1.2.2.2.6 Ensure repairable target-peculiar command/control-related systems removed from battle/crash damaged aircraft are not installed in any other targets until the item is returned as certified to perform the function from the vendor or ALC channels, as applicable.

1.2.2.2.7 Closely monitor and accurately document cost reimbursable items, site PM expenditures, and cost projections.

1.2.2.2.8 Identify and document to the Government actual or potential Contractor program management problems and deficiencies in the operations and maintenance area.

1.2.2.2.9 Ensure corrective actions for all actual or potential Contractor program management problems and deficiencies are accomplished within the time frame specified by the CO.

1.2.2.2.10. The contractor personnel shall wear distinctive clothing (uniforms). Contractor personnel up to branch supervisor (or equivalent) level shall wear uniforms (shirt and pants/shorts or coveralls) with embroidered badges, or screen print that clearly depicts the company name. Contractor shall provide jackets/coats, or insulated coveralls when deemed necessary, that have embroidered badges and organizational patch (optional) that clearly depict the company name; however, off-equipment/shop contractor employees who do not dispatch to hangars or the flight line need not be provided jackets/coats. A U.S. flag patch may be displayed on the upper left sleeve. At no time shall any contractor employee improperly display or present the flag or any portion thereof in a manner that would bring discredit to the flag or its meaning. All clothing worn by contractor personnel must conform to T.O. 00-25-172, AF directives, applicable technical data and OSHA standards and shall be approved by the contracting officer. The contractor shall ensure clothing and jewelry worn by employees does not present a FOD hazard. Waivers or exceptions to the above uniform requirements may be submitted to the C.O. for review on a case-by-case basis.

1.2.2.3 The Contractor shall maintain and employ a personnel recall plan for quick reaction to emergency situations. The Contractor shall furnish the FAC, GFR, PM/CQAE and LG a primary and alternate point of contact to implement recall during non-duty hours.

1.2.2.4 Equipment needed to accomplish the requirements of this PWS, whether Government-furnished or Contractor-owned, shall be maintained and kept current by the Contractor. In some cases, this shall require working with the host base backshop support as identified in the Host Tenant Support Agreement. Some examples include AGE and aircraft tires.

1.2.2.5 The Government may direct or approve Contractor travel above and beyond the normal travel requirements of this PWS. This travel shall be cost reimbursable, using the FJTR as a guide to acceptable costs.

1.2.2.6 Electronic data exchanged between the Government and Contractor shall be compatible with existing ACC-preferred software (currently Microsoft Office). All Contractor data exchange shall be via electronic means unless prior approval is received for hard copy transmission. The Government shall consider any cost-effective proposals submitted by the Contractor detailing alternative and supplemental methods of data interchange.

1.2.2.7 The Contractor shall support Government conferences, test evaluations, reviews, working groups, and program management reviews. The Government shall be responsible for paying Contractor travel and subsistence costs, unless the location is within one hundred miles of the assigned operating location or the Government provides transportation, and the business is conducted within a single twelve-hour period. The Contractor shall normally act as a Government technical advisor at such meetings. The Contractor shall respond to all such cases unless he can clearly show that such support shall substantially degrade his capability to perform the requirements of this PWS.

1.2.2.8 Overtime above the requirements of this PWS shall be charged to the overtime CLIN. Contractor is responsible for managing overtime to ensure this CLIN is used judiciously and is not overdrawn at any time.

1.2.2.9 The Contractor shall conduct labor negotiations, if any, in such a manner as to ensure that any resulting agreement shall not directly or indirectly make the U.S. Government a part to such agreement or be construed to have the sanction of the U.S. Government. The Contractor shall notify the CO of any labor agreement negotiations and provide an assessment of negotiation status while they are in progress. Such reports shall be on a frequency basis as determined by the CO. Such reports can be either oral or written, as determined by the CO. To the extent that such agreements identify wages or other factors as changed from a previous level, the level from which the change was computed shall also be identified.

1.2.2.10 The contractor shall establish and maintain a Strike Plan. One copy of the contractors Strike Plan shall be provided to the Contracting Officer for acceptance not later than 60 days following contract start date. Changes to the plan shall be submitted to the Contracting Officer within 60 days of occurrence.

1.2.2.11 Assignment, transfer, and reassignments of Contractor personnel shall be the prerogative of the Contractor. However, when the Government directs, the Contractor shall relieve any person who endangers life, property, or national security.

1.2.3 Quality Management. The Contractor shall develop, implement, maintain and continuously improve a comprehensive higher-level Quality Control Program (QCP) that assures compliance with all requirements of this PWS. The Contractor shall submit a QCP to the Government for approval.

1.2.3.1 The QCP shall include procedures for training, qualification, and any required certification of employees prior to performance of assigned duties under this contract. Procedures shall include assignment of management responsibility for employee task qualification to specific positions/individuals within the Contractor's organization, as well as the quality control process that shall be utilized to ensure compliance. Specifically the Contractor shall formulate and provide comprehensive training, qualification, and certification procedures for its employees for submission with the QCP. Procedures shall include:

1.2.3.1.1 A description of how the Contractor shall establish and ensure a fully qualified workforce throughout the life of the contract.

1.2.3.1.2 Specific milestones, frequencies, and/or intervals as to when any training, qualification, or certification shall occur.

1.2.3.1.3 Specific methods and procedures as to how training, qualification, or certification shall be accomplished.

1.2.3.1.4 Specific areas in which training, qualification, or certification shall be accomplished.

1.2.3.1.5 The extent or level to which the training, qualification, or certification shall be accomplished.

1.2.3.1.6 The anticipated number and position of those personnel that shall require training, qualification, or certification.

1.2.3.1.7 The number and position of those personnel that shall conduct training, qualification, and certification.

1.2.3.1.8 Lesson Plans that shall be used.

1.2.3.2 The Contractor shall establish a Quality Control Program with the responsibility for inspection, technical publication requirements, configuration control, and material deficiency reporting.

1.2.3.3 The Contractor shall accomplish QA inspections using their Government-approved Quality Assurance Plan and applicable publications as guidance. The following are minimum inspection responsibilities:

1.2.3.3.1 Management Inspections: Inspect each activity annually. This inspection shall encompass all functions under the supervision of the Contractor.

1.2.3.3.2 Quality Verification Inspection (QVI): Perform quality verification inspections on a representative basis by QA following completion of maintenance inspection or repair actions. Perform quality verification inspections on a representative basis on drone pre-flights, post-flights, pre-mission tests, storage procedures, MCS, and SE inspections.

1.2.3.3.3 Critical Stages of Work Inspections: QA shall accomplish these inspections during maintenance, such as engine installation, certain phases of drone console checkout, etc.

1.2.3.3.4 Spot Check Inspection: QA shall perform spot check inspections to determine equipment condition. As a minimum, perform technical inspections on a representative basis for post-flights, preflights, SE, user-calibrated TMDE, test equipment, special tools, and drone peculiar support equipment.

1.2.3.3.5 Special Inspection: Perform special inspections on an as required basis to aid in identifying and solving specific problems.

1.2.3.3.6 Surveillance Inspections: The QA Section shall use surveillance inspections to inspect the quality of maintenance actions. As a minimum, surveillance inspections shall be performed on pre-flights, post-flights, user calibration on TMDE, liquid and gaseous servicing of targets, ground movement of targets, and engine testing/operational checks.

1.2.3.3.7 Additional Inspections: the Government may request additional inspections.

1.2.3.3.8 Inspection Reports: QA shall prepare an inspection report for each inspection. Use Air Force Forms 2419 and 2420 for documentation and routing of inspection findings when discrepancies are found. The Contractor shall initiate corrective action within ten days of the inspection. Submit final copy of each report and routing form to the CQAE. After corrective action and review, QA shall maintain a file of inspection reports.

1.2.3.3.9 NOTE: If Contractor QA personnel identify a discrepancy or discrepancies during an inspection, the Government shall not document the same discrepancy or discrepancies within a reasonable period of time in order to provide time for the Contractor to take corrective actions as approved by CQAE. This does not apply to discrepancies identified previously by the Government nor prevent Government documentation of the Contractor's QA program at any time that deficiencies in the QAP exist.

1.2.3.4 Technical Publications: All aircraft maintenance related publications, T.O.s, and supplements shall be implemented IAW AFI 21-101. Any reference to a publication is meant to include the basic and all its supplements (including base supplements for services and programs that pertain to the contractor) and amendments. Supplements or amendments to listed publications from any organizational level may be issued during the life of the contract. As a minimum, the Contractor QA personnel shall:

1.2.3.4.1 Determine T.O., tech manual, and other publication requirements for each assigned maintenance work center.

1.2.3.4.2 Review all AFTO Forms 22 submitted by Contractor personnel. If changes are valid, document approval in block 14 of the form. Ensure forms are prepared IAW applicable publications and submit to the appropriate ALC.

1.2.3.4.3 Maintain a master file of all technical order checklists and inspection work cards in accordance with T.O. 00-5-1. This inspection shall include all locally prepared checklists and work card decks. Document the inspections on AF Form 2411, Inspection Document.

1.2.3.4.4 Contractor Checklists, Job Guides and Workcards. Local checklists, job guides, and workcards shall be published and utilized IAW TO 00-20-1, T.O. 00-5-1, and AFI 21-101, Para. 8.17.5. Contractor checklists, job guides and workcards shall be reviewed by the Government. Approval is the responsibility of the CPM.

1.2.3.5 Modification Management. Modifications (temporary, permanent, or safety) to Air Force aircraft or equipment are expressly prohibited without HQ ACC coordination/approval. Submit all modification requests (to change the operation, use, or appearance of Air Force equipment IAW AFI 21-101, Para. 1.13) to the PM. Support and participate in studies and tests of aircraft systems upgrades and changes as directed by the PM. The Contractor shall assist in developing, implementing, and sustaining modifications to aerospace vehicles and equipment. The Contractor shall:

1.2.3.5.1 Make aerospace vehicles, equipment, and facilities available and assist in modifications to adapt and test follow-on systems as specified by the FC, GFR, or PM/CQAE.

1.2.3.5.2 Train personnel in use of, and make available, special tools and aircraft T.O.s to 53 WEG, outside government agencies and other contract personnel performing these modifications.

1.2.3.5.3 Develop Job Guides, work cards, Standard Operating Procedures (SOPs), checklists, etc., to supplement T.O. as required and to provide procedures for areas that do not have technical order instructions. All Job Guides, work cards, SOPs, checklists, etc., shall be submitted to the PM/CQAE for review and acceptance prior to implementation.

1.2.3.5.4 Support these programs concurrently with day to day operations. When a conflict exists in supporting programs, projects or taskings simultaneously, the contractor shall defer to the PM/CQAE, 53 WEG/CM or FC for de-confliction or specific priority of support.

1.2.3.6 Material/Quality Deficiency Reports (MDRS/QDRS): The Contractor shall process, monitor, and control all MDRS/QDRs in accordance with T.O. 00-35D-54.

1.2.3.7 Functional Check Flight (FCF): Perform functional check flights, if required, of FSATs to ensure that aircraft are safe for flight and capable of performing assigned missions. Perform FCFs in accordance with T.O. 1-1-300, 1F-4C/D(I)-6, other pertinent directives, or when directed by GFR.

1.2.3.8 Weight And Balance: A QA Inspector shall serve as the Contractor's weight and balance official. The weight and balance official is responsible for compliance with appropriate technical order procedures for weighing aircraft and for maintaining required documents. QA personnel shall oversee preparation, jacking, and weighing of the FSAT (Launch pad supervisor/weight and balance official for SSAT) by Contractor personnel. QA shall verify scale readings and perform actual computations on the weight and balance documents.

1.2.3.9 The Contractor shall establish and maintain a proactive customer oriented inspection system covering the services stated in this PWS. The Contractor shall compile trends identified through inspections and evaluation including analysis of negative trends identifying common problem areas and possible causes for management action. Include a method of identifying and correcting deficiencies in the quality of services performed before the level of performance becomes unacceptable.

1.2.3.10 The records of inspections shall be kept and made available to the Government throughout the contract performance period and for the period after contract completion until final settlement of any claims under this contract.

1.2.3.11 Data Integrity Teams (DIT). The contractor shall establish a DIT. The DIT shall ensure complete and accurate data in the MIS and aircraft forms (to include all inputs made by staff agencies).

1.2.4 Quality Assurance Program. According to the Inspection of Services clauses listed in Part I, Section E, the Government shall evaluate the Contractor's performance under this contract. For those tasks listed in the Service Delivery Summary (SDS), the quality assurance evaluators (QAE) shall follow the methods of surveillance specified in the Government's Quality Assurance Surveillance Plan (QASP). Government personnel shall record all evaluation observations. When an observation indicates defective performance, the QAE shall require the contract manager or representative to initial the observation. The initialing of the observation does not necessarily constitute concurrence with the observation, only acknowledgment that they have been made aware of the defective performance. Government surveillance of tasks not listed in the SDS or by methods provided for by the Inspection of services clauses may occur during the performance period of this contract. Such surveillance shall be accomplished according to standard inspection procedures or other contract provisions. Any action taken by the contracting officer as a result of surveillance shall be according to the terms of this contract. The

Government may unilaterally alter, revise, and update the Quality Assurance Surveillance Plan (QASP) at anytime.

1.2.4.1 The Contractor's QA personnel shall provide the Government QAE personnel a schedule of Inspections to be performed each month, allowing the Government to evaluate, on a random basis, the effectiveness of the QA program.

1.2.5 Security

1.2.5.1 Physical Security. The Contractor shall be responsible for safeguarding all U.S. Government-owned facilities and infrastructure; Government-furnished property and equipment provided for Contractor use; and shall adhere to all applicable Government property security requirements.

1.2.5.2 At the end of each work period, the Contractor shall secure all Government facilities, equipment, and materials, as required.

1.2.5.3 Controlled/Restricted Areas. The Contractor shall implement local installation procedures for entry to Air Force controlled/restricted areas where Contractor personnel shall work. An AF Form 2586, Unescorted Entry Authorization Certificate, must be completed and signed by the sponsoring agency's Security Manager before a Restricted Area Badge shall be issued. Contractor employees must have a favorably completed National Agency Check investigation before receiving a Restricted Area Badge.

1.2.5.4 Key Control. The Contractor shall establish and implement control procedures for ensuring all Government-issued keys, whether physical or electronic, are not lost, stolen, or misplaced and are not used by unauthorized persons. The Contractor shall include these procedures covering key control in the quality control plan. Government-issued keys shall not be duplicated without approval from the CO. The Contractor shall immediately report to the CO and/or FC any occurrences of lost, stolen, or duplicated keys.

1.2.5.5 In the event keys, other than master keys, are lost, stolen, or duplicated, the Contractor may be required, upon written direction of the CO, to re-key or replace the affected lock or locks without cost to the Government. However, the Government may, at its option, replace the affected lock or locks or perform re-keying operations at Contractor's expense. In the event a master key is lost or duplicated, all locks and keys for that system shall be replaced by the Government at Contractor's expense.

1.2.5.6 The Contractor shall prohibit the use of Government-issued keys by any persons other than the Contractor's employees and shall prohibit the opening of locked areas by Contractor employees to permit entrance of non-U.S. Government personnel other than Contractor employees engaged in performance of work covered by this PWS.

1.2.5.7 Lock Combinations. The Contractor shall control access to all Government-provided lock combinations to preclude unauthorized entry. The Contractor is not authorized to record lock combinations without written approval from the CO. Records with written combinations for authorized secure storage containers, secure storage rooms, or certified vaults, shall be marked and safeguarded at the highest classification level as the classified material maintained inside the storage containers being locked.

1.2.5.8 Contractor Personnel Security. All on-site Contractor employees shall wear distinctive clothing bearing the name of the company or wear appropriate badges containing the company name and employee name. Contractor-provided general-purpose vehicles used by Contractor

employees during performance of work shall also be appropriately marked with company logo and/or name.

1.2.5.9 Clearance Requirements. The Contractor shall have full responsibility for ensuring that Contractor or subcontractor personnel have proper security clearances and any licenses as may be necessary in the performance of the contract. The Contractor must possess or obtain a facility security clearance at the classification level of work to be performed prior to performing contract work. If the Contractor does not possess a facility clearance, the Government shall request one. The Government assumes costs and conducts security investigations for facility security clearances. The Contractor shall request security clearances (submit clearance paperwork) for personnel requiring access to classified information within 15 days after receiving a facility clearance or, if the Contractor is already cleared, within 15 days after contract award. Due to costs involved with security investigations, requests for Contractor security clearances shall be kept to the absolute minimum necessary to perform contract requirements. The Contractor shall notify the 82 ATRS security manager 30 days before on base performance of the contract. The notification shall include:

1.2.5.9.1 Name, address, and telephone number of company representatives.

1.2.5.9.2 The contract number and contracting agency.

1.2.5.9.3 The highest level of classified information to which Contractor employees require access.

1.2.5.9.4 The location(s) of contract performance.

1.2.5.9.5 The date contract performance begins.

1.2.6 Support Agreements. See Section D, Paragraph 1, Applicable Documents.

1.2.7 Administration. The Contractor shall accomplish the following tasks:

1.2.7.1 Master Library. Establish and maintain a master library containing copies of all Contractor prepared or acquired technical orders, publications, manuals, operating instructions, special publications, agreements, leases, commercial publications, technical drawings, as-built drawings, computer programs, computer program documentation, and training materials for performance of this PWS. Establish and maintain a current list of all items in the master library. Establish and implement a method of controlling master library items.

1.2.7.2 Functional Libraries. Establish and maintain a functional library. Functional library shall contain current publications, technical orders, commercial manuals, Contractor-generated operating instructions and special publications, and other data required to accomplish operations and management support.

1.2.7.3 Publications and Forms. Assume responsibility for, or establish where none exists, a publications library and a forms library. Obtain the publications and forms necessary to meet the requirements of this PWS.

1.2.7.4 Contractor Procedures (CPs). Develop, implement, and maintain CPs delineating Contractor policies and procedures to fulfill requirements of this PWS. CPs shall be used where mandatory publications, as referenced in this PWS, do not cover or adequately describe the procedures necessary to perform specific work tasks. All Contractor Procedures and/or Contractor-generated Special Publications shall be considered an integral part of this contract,

and shall be subject to acceptance by the CO. Upon written notice of non-acceptance, the Contractor shall address CO comments and resubmit subject CP within 30 days for further Government review. CPs shall be directive in nature and shall be used by the Government to ensure compliance.

1.2.7.5 Commercial Publications and Software. Procure, update, and maintain all commercial publications and software used by the Contractor to meet PWS requirements.

2 TASK REQUIREMENTS

2.0 General Tasks

2.0.1 End-of-Runway (EOR) Procedures. An EOR inspection shall be performed IAW 21-101, immediately prior to take-off at a designated location. This inspection, at a minimum, is a final visual and/or operational check of designated aircraft systems and components. Whenever possible, qualified personnel other than launch crew should perform EOR procedures.

2.0.2 Special Certification Roster (SCR). Develop and maintain SCR per AFI 21-101. The SCR is a management tool providing supervisors a clear and concise listing of personnel appointed to perform, evaluate, and/or inspect work of a critical nature. Normally, only maintenance requirements that have a definite potential for personnel injury or damage to equipment shall be included in the SCR. Other tasks requiring special training or qualifications may be managed on the SCR. Develop, maintain and present a SCR to identify those contractor employees trained and certified to complete critical tasks. **Keep the certification lists of authorized personnel to a minimum consistent with requirements and immediately notify the QAE and PM of any changes.** All certification documentation shall be maintained in an electronic data file and be available for review at Government request. Ensure the SCR is reviewed quarterly by appropriate work center supervisors to verify that all entries are current and accurate, and prerequisites including applicable training, testing, evaluation, or other requirements for task certification have been completed. The CPM shall sign the updated SCR and ensure the Government QAEs have a current copy of the SCR. Any time the SCR changes, a new SCR must be published. To the fullest extent possible, subscale shall comply with following SCR format.

2.0.3 Aircraft and Equipment Forms Documentation. Ensure aircraft or equipment forms are documented IAW AFI 21-101, TO 00-20-1, and specific equipment TO requirements. Review all aircraft and equipment forms to ensure maintenance was completed, forms were properly documented, and discrepancies cleared by authorized personnel.

2.0.4 Data Integrity. Establish data integrity data integrity process to ensure aircraft maintenance data is accurate IAW AFI 21-101.

2.0.5 Information Systems. The Contractor shall use government provided information systems to the fullest extent possible. As a minimum, the contractor shall use government provided Maintenance Information System (MIS), and Tool Accountability System (TAS).

2.0.5.1 MIS. MIS shall be accomplished IAW AFI 21-101. Exception: Maintenance data documentation entered into the MIS may be performed by maintenance operations center personnel. Maintenance data collected during TDYs or deployment shall be input to MIS as soon as possible. To the fullest extent possible, all maintenance actions shall be called in to maintenance control at the end of each duty day.

2.0.5.2 TAS. The Tool Accountability System (TAS) shall be used to account for and manage all tools and equipment used in support of the 53 WEG maintenance activities as specified by applicable AF guidance.

2.0.6 Aircrew and Maintenance Debrief. Establish Aircrew and Maintenance Debrief function IAW AFI 21-101.

2.0.7 Alternate Mission Equipment (AME). Establish procedures to control, store, and manage AME; maintenance, safety, and protective equipment (MSPE); and Dash-21 equipment according to AFI 21-103.

2.0.8 Waiver Requests. Contractors are encouraged to continually improve processes to accomplish PWS tasks. If a more effective or efficient method can be employed in lieu of following AFI 21-101, request a waiver through the PM. Waiver requests shall be accomplished IAW AFI 21-101. The waiver request shall reference the specific AF instruction and provide a detailed justification and explanation of the potential benefits to the Government. The Government will evaluate each request and only those approved in writing by the PM will be allowed. "Test" or "trial" waivers that deviate from AFIs are not authorized without prior PM approval. Submit waiver requests to the PM/CQAE.

2.0.9 Maintenance Recovery Team (MRT) Procedures. The contractor CPM is responsible for deploying MRTs and equipment to recover aircraft IAW AFI 21-101. Establish procedures to deploy MRTs and equipment to recover QF-4 aircraft which are non mission capable maintenance (NMCM) at other air bases/airports when repair is beyond the capability of that local maintenance organization. Immediately notify the respective QAE and the Maintenance Operations Center (MOC) when any 53 WEG aircraft is non mission capable (NMC) off-station. Dispatch a recovery team and equipment to facilitate repairs as soon as possible (ASAP) after notification of aircraft NMCM. It is the contractor's responsibility to obtain necessary parts, supplies, equipment, and transportation to effect repairs in a timely manner. Prepare shipping documents and coordinate with the host wing Logistic Readiness Squadron (LRS), Traffic Management Office (TMO) for the movement of parts, supplies, support and test equipment required for repairs.. The contractor CPM has the authority to grant approval for a single person to sign off their work when only one individual deploys on a MRT IAW TO 00-20-1. Maintenance recovery teams shall be expected to remain with off-station aircraft until aircraft successfully departs. Travel costs will be reimbursed as authorized by cost reimbursable cost line item number (CLIN). Notify QAE with equipment number and nomenclature of each item being sent off-station.

2.0.10 Engine Run Training and Certification Program. Develop and implement an engine run training and certification program IAW AFI 21-101. A comprehensive engine run certification

program shall be developed and strictly enforced to prevent safety mishaps and potential loss of life. All maintenance personnel authorized to start and operate aircraft engines shall be trained and certified to operate engines at T.O. determined power settings. Aircraft engine motoring shall only be performed by qualified engine run personnel.

2.0.11 Communications. Maintain effective and efficient communications throughout the maintenance complex IAW AFI 21-101.

2.0.12 RESERVED.

2.0.13 Land Mobile Radio (LMR) Management. Manage IAW AFI 21-101 and base communication policies.

2.0.14 Cannibalization. Comply with cannibalization actions IAW AFI 21-101.

2.0.15 Government Training. The Contractor shall provide formal classroom training on periodic and a non-periodic basis to Government-designated individuals. FSAT QAEs shall be trained annually in Cockpit Familiarization. The Contractor shall provide orientation training on the command/control telemetry, MCS, GRDCS II, or target systems to Government personnel upon request. This orientation training is anticipated to occur at least quarterly. The Contractor and the Government must mutually agree upon other training.

2.0.16 Crashed, Damaged or Disabled Aircraft Recovery (CDDAR) Program. Provide QF-4 and SSAT airframe/system familiarization training, technical expertise, technical data, and Mission Design Series (MDS) unique tools/special equipment to Government personnel and assist host base recovery operations as necessary during real world responses for QF-4 and SSAT aircraft IAW AFI 21-101, Para.14.10.

2.1 Management, Operations and Maintenance of Full Scale Aerial Targets (FSAT)

2.1.1 The Contractor shall furnish management, operation, and maintenance services required to operate and maintain Full-Scale Aerial Targets (FSATs). The Contractor shall perform the requirements defined in this Performance Work Statement (PWS) including attachments hereto and documents referenced herein. Provisions of this PWS apply to operating locations at Tyndall Air Force Base (TAFB), Florida, Holloman Air Force Base (HAFB), New Mexico, and TDY locations. At these locations provisions of this PWS are binding unless specific instructions to the contrary are specified herein. The FSAT systems are currently based at TAFB and HAFB, with possible requirements for mutual support between locations for special missions requiring additional pilots, controllers, or launch crews.

2.1.1.1 Contractor shall appoint a contractor pilot as an Aerial Targets Weapons Officer at Tyndall. Pilot must be a graduate of the USAF Weapons Instructor Course for the F-15C/E, F-4, or F-16 and have a minimum of 1000 hours fighter time. Additionally desired qualifications include: Fighter Weapons Instructor Course graduate, F-4 division. F-4 and/or QF-4 flight time with Safety Pilot experience and flight time logged as Aircraft Commander or pilot in E-9a. The Weapons Officer shall be responsible for assisting other squadron Instructor Pilots. Assists USAF personnel, on a noninterference basis, to develop and implement squadron full-scale aerial

target tactics programs, including instructions, briefing, profile development and preparation of manuals and other publications. FSAT "tactics" incorporate all areas of FSAT operations, manned and remote. If Weapons Officer is a graduate of the F-4 division, he is also subject matter expert for overseeing that squadron pilots are well versed in F-4 aircraft handling. The Weapons Officer shall coordinate closely with the Government Flight Representative. The USAF agrees to supply/support any qualification training required to ensure contractor selected for weapons officer duty is currently a qualified QF-4 IP.

2.1.2 The Government shall be responsible for the operational employment of the functions described herein and retains to itself all operational control. The 53 WEG Commander shall exercise operational control to include scheduling, configuration, and mission parameters, such as conditions for launch, mission profiles, and recovery modes of the various functions. The Government shall provide a mission commander, designated by the 53 WEG Commander, at the drone control location during all unmanned target missions. The mission commander shall exercise operational control of the target employment. The Government may provide Air Force aircrew members for FSAT and AP/TM missions.

2.1.3 The Contractor shall have the capability to support a variety of missions, including:

2.1.3.1 Perform flight operations at two locations: TAFB and HAFB. These flight operations shall include NULLO and manned missions. The Government shall specify launch schedules, configuration, and modification of FSATs. A spare aircraft shall be provided for each mission unless the GFR directs otherwise. Aircraft shall be launched, flown, and recovered in accordance with all applicable Government technical and safety publications.

2.1.3.2 Aircraft and drone systems acceptance inspection activities through satisfactory SAFE flight. The contractor shall be responsible for operation and maintenance of Government-furnished equipment and operation of contractor-furnished equipment installed on the aircraft, from aircraft delivery until completion of satisfactory SAFE flight.

2.1.3.3 Operation and maintenance of an unrestricted aircraft fleet ("manned fliers") of 14 aircraft: nine at TAFB and five at HAFB. This total may differ by one or two at various times during the contract. Number of manned fliers deployed to either operating location shall be based on mission requirements and approved by the Government.

2.1.3.4 Operation and maintenance of restricted aircraft at TAFB and HAFB. Provide a maximum of 100 satisfactory NULLO missions per year – 80 at TAFB and 20 at HAFB. The total number of flights at each location shall be determined by mission requirements. The Contractor shall support an increased requirement at either location when the Government and the Contractor agree that the increase is within the Contractor's on-site capability.

2.1.3.5 A new Contractor shall satisfactorily demonstrate two "hands off" captive remote-control flights prior to commencing operations. These flights shall be simulations of FSAT drone flights and include demonstration of items as required by the GFR. The Government may require the new Contractor to satisfactorily accomplish up to four NULLO missions during the transition-training period and prior to contract start date.

2.1.3.6 The Contractor shall support the following mission requirements:

2.1.3.7 NULLO (TAFB).

2.1.3.7.1 Be prepared to launch a maximum of six NULLO sorties per week.

2.1.3.7.2 The Government may direct the Contractor to provide FSAT missions in excess of the normal effort, provided the FAC, GFR, LG, and the Contractor agree that such support is within the Contractor's on-site capability.

2.1.3.7.3 Support a surge effort of approximately three weeks duration for the WILLIAM TELL Weapons Meet.

2.1.3.7.4 The level of effort at TAFB includes approximately 70 single missions and approximately ten 2-ship drone formation missions.

2.1.3.7.5 If the Contractor is to support more than a 2-ship drone mission, it may require mutual support from HAFB.

2.1.3.7.6 The Government shall provide the Contractor 72 hours notification of multiple drone missions, ten days notification for more than 2-ship drone missions.

2.1.3.7.7 NULLO (HAFB).

2.1.3.7.7.1 Be prepared to launch a maximum of four NULLO sorties per week.

2.1.3.7.7.2 If the Contractor is to support a 2-ship drone mission, it may require mutual support from TAFB.

2.1.3.7.7.3 The Government shall provide the Contractor ten days notification of multiple drone missions.

2.1.3.7.7.4 The Government may direct the Contractor to provide FSAT missions in excess of the normal efforts provided the Government and the Contractor agree that such support is within the Contractor's on-site capability.

2.1.3.7.8 Manned. The Contractor shall provide approximately 1120 successful manned sorties per year - 720 sorties at TAFB and 400 sorties at HAFB. The Contractor shall support the following mission requirements:

2.1.3.7.8.1 Provide a maximum of 24 manned sorties per week at TAFB. Monthly maximum sorties shall not exceed 80 combined manned/NULLO sorties.

2.1.3.7.8.2 Provide a maximum of 12 manned sorties per week at HAFB. Monthly maximum sorties shall not exceed 40 combined manned/NULLO sorties.

2.1.3.7.9 Special Events. The Contractor shall cooperate in Government special events, such as providing static displays of targets and/or equipment for which the Contractor is responsible, and personnel to brief visitors. The Contractor shall deliver targets and/or equipment to designated areas and return such items immediately upon completion of the special event, as directed by the Government. The Contractor shall provide support personnel for FSATs returning from cross-country flights.

2.1.3.7.10 Maintenance. Aircraft shall be launched, flown, and recovered in accordance with all applicable Government technical and safety publications. The Contractor shall:

2.1.3.7.10.1 Establish an on-site maintenance management organization at TAFB and HAFB to manage and maintain all FSATs assigned to the Contractor. The Contractor shall ensure that all maintenance personnel are fully qualified on assigned equipment and the Contractor shall accomplish any required training. Fully qualified is that expertise necessary to predict, identify, and resolve problems and take required actions quickly and accurately. The Contractor shall have sufficient manning and equipment to support the required flying sorties while also supporting a positive corrosion-control program, pre-mission testing, organizational and intermediate level maintenance, configuration changes, modification, and preparing additional aircraft for active flying.

2.1.3.7.10.2 Assist the Government in determining organizational, intermediate and depot-level maintenance requirements as necessary. When the Contractor disagrees with a classification of maintenance that has previously been established, the Contractor shall notify the LG in writing (CDRL A-023) and shall recommend changes.

2.1.3.7.10.3 Perform organizational, intermediate, and depot level Time Compliance Technical Orders (TCTOs) on equipment the Contractor is responsible to maintain. This includes performing TCTOs on spares in the Contractor's possession and in base supply. Document TCTO compliance in the Government-provided MIS.

2.1.3.7.10.4 Perform all maintenance tasks beginning with preflight and continuing through mission debriefing for all mission requirements.

2.1.3.7.10.5 Recover and return drag chutes, chute canisters and attachment cables to the Recovery Systems maintenance facility. At TAFB perform:

2.1.3.7.10.5.1 Inspection

2.1.3.7.10.5.2 Intermediate maintenance

2.1.3.7.10.5.3 Build up

2.1.3.7.10.5.4 Packing and control

2.1.3.7.10.6 RESERVED

2.1.3.7.10.7 Make aircraft available and assist in modifications to adapt and test follow-on scoring systems as specified by the Government.

2.1.3.7.10.8 Develop special maintenance OIs, SOPs, checklists, etc., to supplement Technical Orders as required and to provide procedures for areas that do not have technical order instructions.

2.1.3.7.10.9 Deliver all Test, Measurement, and Diagnostic Equipment (TMDE) due for calibration as scheduled by the local TMDE facility. The Contractor shall also pick up equipment from TMDE and return it to the maintenance facility when TMDE completes calibrations.

2.1.3.7.10.10 Manage a program for the explosives required for FSAT operations (up to and including class/division 1.1), such as the MK 8 warhead, chaff, flares, seat catapult and other egress items. Specific requirements are:

2.1.3.7.10.10.1 Appoint an explosive safety representative.

2.1.3.7.10.10.2 Control, transport, receipt, storage, accountability, inventory, forecast, turn-in, and expenditure of explosive items IAW host base procedures and applicable directives. All explosive items shall be turned in to AFK Supply when not required.

2.1.3.7.10.10.3 Establish and control a munitions custody/user account with the munitions supply account.

2.1.3.7.10.10.4 Request routine requirements from the munitions accountable control officer three workdays prior to the required time of issue.

2.1.3.7.10.10.5 Perform all maintenance to include installation/removal and inspection of the egress, chaff, flare, and destruct systems. Exception: If a FSAT sustains damage during recovery (landing), lands with battle damage, and/or there is doubt that the system is normal, Government Explosive Ordnance Disposal (EOD) personnel shall safe and/or remove the destruct, chaff, or flare packages.

2.1.3.7.10.10.6 Perform upload/download of all approved FSAT pylons and external stores to include appropriate training, clearances, manning, checklists, etc.

2.1.3.7.11 Video Coverage. The Contractor shall provide video recording coverage of all SSAT launches and all FSAT NULLO remotely controlled takeoffs, approaches, and landings at TAFB only. The Contractor shall maintain videotapes for two weeks and furnish copies to the Government upon request.

2.1.3.7.12 Mishap Investigation and Reporting. The Contractor shall participate and cooperate in mishap investigations conducted by the Government. Flight, missile, and ground mishaps shall be investigated and reported in accordance with applicable publications. The

Contractor shall provide assistance to the investigation board as required. The Contractor may be tasked to assign personnel to mishap investigation boards. In this case, assigned Contractor employees shall remain assigned to the board until the board is complete or their services are no longer required. The Mishap Investigation Board Commander shall make the decision on when the board is complete. Immediately following an actual or suspected mishap, the Government shall impound all aircraft/drone maintenance records, flight logs, and other applicable documents for investigation.

2.1.3.7.13 Aircraft Inlet/Intake/Exhaust Certification. Contractor shall develop a comprehensive training program to ensure personnel are knowledgeable and proficient in the performance of intake/ inlet/exhaust inspections.

2.1.3.7.13.1 Certification Criteria. Upon completion of formal training, individuals are task evaluated by a certifying official (an individual other than the instructor who administered the course), and placed on the SCR. Certifying officials shall be appointed by the CPM .

2.1.3.7.13.2 Annual Recertification. Each certified mechanic is required to be recertified annually by a certifying official. Recertification is accomplished by having the mechanic demonstrate they can perform the task(s). A QA PE may be used to satisfy this requirement if the QA evaluator is a certifying official.

2.1.3.7.14 Scheduling. Provide scheduling of all required crew members (Government and Contractor pilots, E-9 mission crew, controllers, Government Mission Commanders, etc.).

2.2 Management, Operations and Maintenance of Subscale Aerial Targets (SSAT)

2.2.1 The Contractor shall furnish management, operation, and maintenance services required to operate and maintain Subscale Aerial Targets (SSATs), (BQM-34, MQM-107, BQM-167 and follow-on targets) at Tyndall AFB.

2.2.2 The Contractor shall provide personnel to perform the subscale operation and maintenance tasks as specified herein. The Government shall specify launch schedules, configuration, and modification of subscale targets. The Government may direct the Contractor to provide SSAT missions in excess of the normal efforts provided the Government and the Contractor agree that such support is within the Contractor's on-site capability. Targets shall be launched, flown, and recovered in accordance with all applicable Government technical and safety publications.

2.2.3 The Contractor shall ensure that all maintenance personnel are fully qualified on assigned equipment and the Contractor shall accomplish any required training. Fully qualified is that expertise necessary to predict, identify, and resolve problems and take required actions quickly and accurately. The Contractor shall have sufficient manning and equipment to support scheduled SSAT sorties while also supporting a corrosion-control program, pre-mission testing, organizational and intermediate level maintenance, configuration changes, modification, and preparing additional drones for flying.

2.2.4 The Contractor shall support any target mission scheduled with at least 18 hours advance notification of final flight configuration. Due to the special nature of some test projects, the Contractor shall expend maximum effort to support missions scheduled with less than the required 18 to 72 hours notification.

2.2.5 The Contractor shall pick up subscale targets at the target retrieval drop-off point for return to the drone maintenance hangar. The Contractor shall assist the Government with the retrieval of subscale targets from locations anywhere along the Gulf coast. The Contractor shall return to service all repairable target components and shall make proper disposition of target residue.

2.2.6 The Contractor shall meet the following operational requirements:

2.2.6.1 Be capable of providing 210 satisfactory subscale target missions per year.

2.2.6.2 Prepare targets modified to carry the following configurations in sufficient quantities to meet the flying schedule and the satisfactory mission goals: DLQ-9 ECM, ALE-40 Chaff/Flare, and ALE-44/APC-4 and follow-on dispensers/pods. This work includes the fabrication and build-up of all required installation kits. Configuration changes and modifications shall be as specified by the Government. Contractor configuration and modification maintenance shall be provided and scheduled to support specified operations. The Contractor shall notify the Government when requested/scheduled drone configurations/modifications and scheduled drone operations conflict. The Government may approve overtime to support required configuration/modification and drone operations. No missions shall be flown with known aerospace vehicle discrepancies (other than those permitted by appropriate T.O.s), known drone command control equipment discrepancies, or other problems unless the GFR specifically directs the mission to continue.

2.2.6.3 Be prepared to launch a maximum of 16 satisfactory subscale missions per week. A spare shall be provided for each mission unless the GFR directs otherwise. Due to limited range availability, the Government may schedule up to six drones in a single range period. If more than one target is launched during a range period, each target that meets mission requirements shall count toward the total subscale target missions.

2.2.6.4 Perform required organizational, intermediate, and applicable depot-level maintenance on target systems and their associated augmentation and when applicable, scoring systems.

2.2.6.5 Perform organizational, intermediate, and applicable depot-level maintenance on both common and peculiar subscale test equipment, SE, ground launchers, and launch equipment.

2.2.6.6 Have the expertise to perform in-house maintenance on drone peculiar items at the intermediate level.

2.2.6.7 Reserved

2.2.6.8 Accomplish TCTOs as applicable.

2.2.6.9 Perform coordination and reporting of all drone propulsion unit status to the appropriate engine manager.

2.2.6.10 Perform all maintenance tasks beginning with preflight and continuing through mission debriefing for all mission requirements.

2.2.6.11 Recover and return drag chutes, chute canisters and attachment cables to the Recovery Systems maintenance facility and perform:

2.2.6.11.1 Inspection

2.2.6.11.2 Intermediate maintenance

2.2.6.11.3 Build-up

2.2.6.11.4 Packing and control

2.2.6.12 Assist Government personnel in recovering, reclaiming, and returning recoverable or damaged aerospace vehicles or equipment. At the direction of the FAC, GFR, or LG, the Contractor shall recover and return damaged SSAT components, parts and equipment to the Government. The Government shall provide disposition instructions.

2.2.6.13 Maintain where applicable airborne target and future scoring systems to the organizational level IAW Government-provided data and with Government-provided test equipment. The Contractor shall make targets available and assist in modifications to adapt and test follow-on scoring systems as specified by the Government.

2.2.6.14 Install and test recovery system primers and reefing line cutters IAW Government safety procedures.

2.2.6.15 Pick-up and deliver recovery batteries from/to battery shop.

2.2.6.16 Return recovered targets to the maintenance facility.

2.2.6.17 After decontamination, inspect items for serviceability and store in a secure area. Pick-up other hardware residue weekly. Remove RATO bottles and associated hardware visible in the water or on the beach in front of the launch site at low tide.

2.2.6.18 Remove targets from storage, perform weight and balance, and RATO installation in preparation for ground launch. Store, maintain, handle, and install RATO and pyrotechnic devices IAW Air Force safety procedures.

2.2.6.19 Store crated targets and accomplish the uncrating, inspection, assembly or disassembly of targets at the maintenance area.

2.2.6.20 Perform receiving inspection on targets upon removal from shipping crates. Report any damage and/or missing equipment to the GFR, CQAE, or LG, and coordinate with AFMC or other agencies in resolving the noted discrepancies.

2.2.6.21 Manage a program for the explosives required for SSAT operations (up to and including class/division 1.1), such as RATO bottles, chaff, flares, squibs and impulse cartridges. Follow requirements outlined in paragraph 2.1.3.7.10.10.

2.2.6.22 Perform all maintenance to include installation/removal and inspection of the chaff and flare systems. Exceptions: If a SSAT sustains abnormal damage during recovery, lands with battle damage, and/or there is doubt that the system is safe, Government Explosive Ordnance Disposal (EOD) personnel shall safe and/or remove the chaff or flare package.

2.2.6.23 Maintain the land recovery area, to include disking, plowing, etc. in order to minimize excessive target damage upon target impact.

2.2.6.24 Support WILLIAM TELL for approximately three weeks of surge conditions. Spare targets may be required when a high priority program requires rapid turnaround and peak levels of effort such as the WILLIAM TELL competition.

2.2.6.25 Obtain wind information for launch and recovery operations and pass them to the appropriate agencies.

2.2.6.26 Plan subscale target flights to meet desired mission parameters as defined by the applicable briefing, directives, orders, or specifications.

2.2.6.27 Perform required pre-launch checks of target systems, scoring systems, and augmentation systems.

2.2.6.28 Provide a minimum of four qualified controllers for each type of drone.

2.2.6.29 Be responsible for commanding recovery of subscale targets in the designated recovery areas.

2.2.6.30 Accomplish necessary mission coordination with GCI facilities, radar tracking sites, and scoring stations during all missions.

2.2.6.31 Record flight information; maintain records of drone flights, overlays and telemetry recordings of flight performance for all missions. Telemetry recordings shall be maintained for 30 days after each mission unless the FAC or GFR request differently. Additionally the Contractor shall submit the information as requested by the FAC or GFR concerning test projects as long as the information requested is within the normal on-site capability of the Contractor.

2.2.6.32 Distribute target performance and scoring results data as requested by 83 FWS/WSEP Data Analysis Section.

2.2.6.33 During preflight and pre-launch checks of each subscale drone mission, verify that the IFF Transponder (L-band beacon) is operating satisfactorily for range safety purposes.

2.2.6.33.1 Control subscale targets to meet mission requirements.

2.3 Management, Operations and Maintenance of Range Control Facility (RCF), Range Control System (RCS), and Gulf Range Drone Control System (GRDCS II)

2.3.1 The Contractor shall furnish management, operation, and maintenance services required to operate and maintain the Range Control Facility (RCF). The RCF includes GRDCS II and RCS. The AN/TPS-63 radar located at Site D-3B and other pertinent equipment at Range Support Facilities (RSF) (discussed in section 2.4) support RCF operations. The GRDCS II consists of 20 RISC 6000 computers with data base replication across a dual Token Ring Network System. The RCS consists of four Sun Micro systems computers (three Enterprise 250s and one Enterprise 3000), and other computer hardware to process and display range data from multiple sensors, GRDCS II, and the AP/TM platform.

2.3.2 Paragraph reserved

2.3.3 GRDCS II operates as a multi-function command and control, tracking, and data link system capable of supporting Force Development Evaluations. These evaluations include all facets of systems test and evaluation such as Developmental Test & Evaluation (DT&E), Operational Test & Evaluation (OT&E), Test Development & Evaluation (TD&E), and the Weapon System Evaluation Program (WSEP) which includes air-to-air missile firing missions over the Gulf Range. The main ground portions of the system are located at Tyndall AFB, with a communication/data link to the Eglin Central Control Facility (CCF). GRDCS II also interfaces with other Gulf Range programs, including the Airborne Platform (AP), RCS, and Global Positioning System (GPS). GRDCS II simultaneously controls a mix of up to four subscale and full-scale targets (any combination of four targets) flying individually or in formation. The system is capable of controlling targets to the targets' limits for altitude, airspeed, and maneuverability. The system is also capable of launching and recovering all targets in a fully automatic mode and controlling them throughout highly dynamic maneuvers. Additionally, the system shall acquire time-space-position-information (TSPI) data on up to seventeen instrumented participants (aircraft, targets, etc.). GRDCS II also provides a dual data link for selective flight termination of both targets and missiles. The primary coverage area is over Warning Areas W-151 and W-470 of the Gulf Range but can be extended south of these areas.

2.3.4 The Contractor shall:

2.3.4.1 Operate as necessary for maintenance, and maintain the equipment listed in this PWS. The Contractor shall provide on-call maintenance for the 100 series items in the GFP list. The Contractor shall provide operations and maintenance for the 200, 300, and 600 series items in the GFP list.

2.3.4.2 Document all preventive or corrective maintenance actions taken. The documentation shall include the action taken, number of man-hours expended, make, model, and serial number

or ID number of the equipment repaired, date(s) of repair, and the individual(s) performing the repair action. The Contractor may use the capabilities of the GFE computers for documenting this information as long as this effort does not interfere with other WEG functions.

2.3.4.3 Provide access to all records relating to maintenance actions, including maintenance man-hours and parts costs whether recorded on paper, magnetic, or other media.

2.3.4.4 The Contractor shall prepare and implement preventive maintenance procedures for Communications-Electronics equipment for which procedures do not exist. Preventive maintenance checks shall be made at least quarterly unless the Government has placed the equipment or system in on-site storage or 30-day call-up.

2.3.4.5 Upon expiration of this contract, or any option period, which the Government elects not to exercise the next option, the in-coming contractor shall account for any recognized equipment deficiencies as part of the inventory of government-furnished equipment at contract changeover.

2.3.4.6 Provide de-installation, relocation, and reinstallation capability for hardware and software. The Contractor shall accomplish these actions when tasked in writing by the Government.

2.3.4.7 Provide operator maintenance for the TMDE listed in T.O. 33K-1-100 unless specific directions to the contrary are received from the Government. The Contractor shall, at the option of the Government, remove certain items of equipment from the Contractor's maintenance program and transfer the maintenance responsibility to the TMDE facility.

2.3.4.8 Maintain a complete set of spares for critical computational system components on site. Ninety percent of non-critical components shall be available within 24 hours of component malfunction. The GFE list in the PWS shows a "C" down the left hand margin for equipment designated as critical and a "NC" if the equipment is non-critical.

2.3.4.9 Off-site maintenance involves repair of both critical and non-critical equipment outside the Government facility. No requirement exists for individual equipment spares for off-site maintenance. Contractor personnel determine whether they can fix the broken equipment or require external support for repair. If the Contractor elects to fix the equipment, they have 5 duty days to repair the item. Should the Contractor be unable to repair the equipment within 5 days, the Contractor shall ask the Government to grant an extension to continue the repair, or require external support for repair. The Contractor shall be responsible for the equipment from the time it leaves the Government site until it returns to the Government site in good operating condition.

2.3.4.10 Begin remedial maintenance promptly after notification that equipment is inoperative. The Contractor shall provide the Government with a designated point of contact and make arrangements for its customer engineer to receive such notification.

2.3.4.11 Build and modify templates as the need arises.

2.3.4.12 Provide diagnostic procedures/software required to ensure the ADP systems are fully functional and ready to support the mission.

2.3.4.13 Maintain, transport and load the GRDCS II P-4 tracking pods in accordance with applicable publications.

2.3.4.13.1 Provide organizational and intermediate level maintenance for the GRDCS II P-4 tracking pods.

2.3.4.13.2 Maintain logs of maintenance/repair activities for each pod. Track pod I/Ds and aircraft I/Ds to determine if pod or aircraft is at fault during an in-flight malfunction.

2.3.4.13.3 Ensure all pods released for aircraft loading are operational.

2.3.4.13.4 Transport pods between pod maintenance facility and the aircraft/flightline or other support facilities if required.

2.3.4.13.5 Provide qualified load crews to deliver pods to the flightline and load/unload pods on applicable aircraft. Crews shall meet all security requirements for restricted area access.

2.3.4.13.6 Install pods and make electrical connections between pods and aircraft NLT 1 1/2 hours before scheduled takeoff time. Download pods as required.

2.3.4.13.7 Support a surge effort of approximately three weeks duration for the William Tell Weapons Meet.

2.3.4.13.8 Coordinate with applicable agencies for pod loading/unloading (i.e. 83 FWS/MAX), and provide needed information (pod/aircraft I/D numbers and locations) for mission support.

2.3.4.13.9 Perform operational check of pods before aircraft launch in accordance with directives. Notify appropriate office if pod requires replacement before launch.

2.3.4.13.10 Respond within ten minutes in the event of aircraft aborts to load pods on alternate aircraft or transfer pods between aircraft. Support schedule changes to the maximum extent possible.

2.3.4.13.11 Monitor P-4 pod hanger wear tolerance in accordance with manufacturer's specifications (Cubic Corp, Field Services Procedure 149-2A).

2.3.4.13.12 Provide corrosion control of P-4 shooter pod assemblies. Corrosion control procedures should include complete paint schemes.

2.3.4.13.13 Provide support for P-4 shooter pod testing or special projects as requested through the GFR or LG (i.e. adapting to new aircraft).

2.3.4.13.14 Store P-4 GRDCS II tracking pods out of inclement weather when not loaded on aircraft. Storage procedures shall include inventory control and installation of dust/protective covers on pods when not in use.

2.3.4.13.15 Maintain and provide pod status to Government on request or if it could affect the flying schedule.

2.3.4.13.16 Down load and store pods daily when flying is complete. Pods shall not remain on aircraft overnight or on weekends.

2.3.4.13.17 Maintain the P-4 tracking pod test set in accordance with applicable publications.

2.3.4.13.18 Provide depot level support, including calibration, for the DLS and DLS test set. This support shall include maintaining technical drawings, manuals and the distribution of changes or supplements. Approval/Disapproval of such changes and supplements require coordination through the Item Manager, Quality Assurance, and the Government.

2.3.5 The nature of the Range Control Facility's mission dictates that any support provided is flexible and timely. The WEG supports test and training missions as well as WSEP. The WEG also supports demonstrations of the RCF's capabilities. In many cases, a relatively simple requirement in appearance is rather complex in systems programming or hardware modification.

2.3.5.1 Programming Support: The Contractor shall:

2.3.5.1.1 Originate, install, test, and document software to accomplish specific objectives communicated from the Government in writing. Normally, software requirements are stated in terms of the desired result or data product rather than in method of accomplishment unless the Government specifically requires a particular method of accomplishment.

2.3.5.1.2 Develop a software development plan IAW DOD-STD-2167A (DIR-MCCR-80030A) and 53 WEG OI 63-2.

2.3.5.1.3 Update sub-tasks for system software, integrate these tasks into the overall system software, test, and document these tasks.

2.3.5.1.4 Provide the capability to modify system simulator software.

2.3.5.1.5 Generate or update real-time graphic or alphanumeric display software.

2.3.5.1.6 Provide the capability to generate graphic or alphanumeric display software for the microcomputers provided under this contract.

2.3.5.1.7 Provide the capability to update GRDCS II guidance and navigation software and drone control software.

2.3.5.1.8 Provide documentation of any software changes, proposed changes, or reviews.

2.3.5.1.9 Provide programmers capable of origination or modification of programs written in ANSI, FORTRAN, Z80 assembly language, ADA, C, PASCAL, Microsoft Assembler, and shell programs written for IBM AIX extension, AT&T System 5 UNIX, and BSD UNIX.

2.3.5.1.10 Generate or modify built-in test routines used to align or to test data processing equipment.

2.3.5.1.11 Provide necessary software support for the DLS test set including proper documentation of software changes.

2.3.5.1.12 Provide documentation of proposed changes of a computer software configuration item.

2.3.5.2 Engineering: The Contractor shall provide the following engineering capability:

2.3.5.2.1 Update hardware and software (firmware) IAW 53 WEG OI 63-2.

2.3.5.2.2 Update, modify or originate software for the Z-80 CPU in the DLS.

2.3.5.2.3 Design specialized equipment and interfaces for the GRDCS II and RCS.

2.3.5.2.4 Design/modify and test radio frequency (RF) equipment used in Drone Control Systems.

2.3.5.2.5 Assist in troubleshooting complex problems in the equipment provided.

2.3.5.2.6 Prepare modification requests IAW applicable publications.

2.3.5.2.7 Instruct personnel in the design or construction of equipment or interfaces. The personnel may be USAF, civilian, or Contractor personnel designated by the 53 WEG.

2.3.5.2.8 Perform engineering studies/performance trade-off studies/cost comparisons when tasked by the WEG via the PCO/ACO or CQAE.

2.3.5.2.9 Document the engineering support with drawings, theories of operation, maintenance procedures, draft specifications, and with a task status report submitted monthly IAW CDRL Item A-14. The task status report shall contain a short description of the requirement, the status to date; problems encountered or anticipated, and expected completion date. The report shall contain the status information for both hardware and software tasks and shall be written in letter format with an original and one copy furnished to the LG.

2.3.5.2.10 Participate in configuration control boards.

2.3.5.2.11 Diagnose, trouble shoot and reconfigure Ethernet and Token Ring networks using TCP/IP protocol.

2.3.6 Configuration Management.

2.3.6.1 The authority for configuration management for this contract is the 53 WEG, through the use of local regulations and operating instructions.

2.3.6.2 The Contractor shall support the configuration management/control of the Range Control Facility (RCF). This support shall include documenting all observed or known system software and/or documentation errors with the Deficiency Report (DR) Form FL1 IAW 53 WEG OI 63-2 (CDRL A-18) and the System Improvement Report (SIR). Support shall also include attending both RCS and GRDCS II configuration control board (CCB) meetings.

2.3.6.3 The Contractor shall make NO modifications without the expressed written permission of the Government. Verbally- approved modifications by the Government for feasibility investigations are authorized for a short time but shall be removed within 24 hours of notification of a mission requirement. Modifications to hardware or software used in mission support require the expressed written permission of the Air Force.

2.3.6.4 The Contractor shall maintain configuration control over all hardware and software furnished as a part of this contract.

2.3.6.5 The Contractor shall furnish a Configuration Control Procedure to the CQAE and/or LG for approval within 45 days after contract award (CDRL A-22). The Contractor shall implement the Government-approved procedure.

2.3.7 Technical Writing.

2.3.7.1 The Contractor shall provide technical writing support for special projects conducted within the WEG. These projects may include tactics development and evaluation plans and reports, Gulf Range Facilities Manual updates, reports and plans for aerial target status or utilization, and other technical reports as requested by the WEG. This effort is estimated to be less than one man-year per year. When so tasked, the status of the technical writing requirement shall be included in the monthly status report, and shall include an estimated date of completion. (CDRL A-001)

2.3.7.2 The Contractor shall obtain the data, analyze according to prescribed guidelines, and produce a camera-ready copy for reproduction. In addition to the camera-ready copy, the Contractor shall provide a copy of the electronic media used to record the report, such as a floppy disk. Graphics and illustration support are not required from the Contractor unless such graphics and illustration capability are furnished by the Government as part of a software package and installed on one of the Government-furnished computer systems for which the Contractor has assumed the operations or maintenance responsibility.

2.3.7.3 The information used in the preparation of these reports may be classified. The Contractor shall provide suitable protection for all information furnished, derived, or acquired in support of this technical writing/technical editing effort according to the requirements of the

Industrial Security Manual. In addition, the Contractor shall not release information to any other Contractor or Government agency outside the 53 WEG without written permission from the Government.

2.3.7.4 The Contractor shall produce reports according to tasking provided to the Contractor by the Government for each occurrence. The tasking document shall contain the relative priority of the effort, classification guidelines, content, and other parameters appropriate for the final copy. Engineering reports or other operations and maintenance data generated to support other portions of this PWS may not be considered Technical Writing, unless the tasking is specifically identified as such in writing by the Government.

2.4 Management, Operations and Maintenance of Associated Radar, Video, Telemetry, and Communications equipment

2.4.1 The RCS automatically gathers, processes, displays, records, and reproduces pertinent range information to support the Command, Control, and Communications (C3) of various range missions and range safety functions. Range data for the RCS originates from: a 53d Weapons Evaluation Group (WEG)-owned AN/TPS-63 tactical radar located at Site D-3B; Federal Aviation Administration (FAA) ARSR - 4 area surveillance radars located at Tyndall Site J-11 and Cross City; the GRDCS II within the RCF; and the AP/TM system.

2.4.2 The AP/TM-aircraft (E-9A) is an integral part of the Gulf Range Air-to-Air Instrumentation System. It provides multiple radio frequency links on the Gulf Range between airborne mission participants and the shore-based support facilities. Aircraft are instrumented with subsystems to relay missile performance telemetry (TM), UHF voice radio and GRDCS II Datalink Subsystem (DLS) communications. Although used primarily for over-the-horizon, real-time datalink, AP/TM shall also perform radar sea surveillance downlinking boat positions to the RCF.

2.4.3 The Contractor shall meet the following operational requirements:

2.4.3.1 Support all missions with an operational RCF. This shall include computer hardware and software preparations and modifications to meet specific mission parameters. This shall also include the operation/preparation and maintenance of the Motorola/CSTI communications suite found in buildings 1801 and 1277. All modifications shall conform to procedures prescribed by 53 WEG OI 63-2.

2.4.3.2 Provide data reduction and formatting after each mission in the type and quantities specified by the Government.

2.4.3.3 Support new equipment and systems that may replace or add to the equipment and systems in use. This support is limited to the mission requirements and may include installation and checkout.

2.4.3.4 Perform operational checkout or bench checkout of systems or components that have had their performance during a mission questioned.

2.4.3.5 Identify discrepancies or problem areas that affect operations to the Government following each mission. Results of actions to correct the discrepancies or problem areas shall be briefed to the Government prior to the next operational mission.

2.4.3.6 Participate in the pre-mission checks and performance checks of GRDCS II-equipped aircraft.

2.4.3.7 Participate in the post-mission debriefings and shall present any recommendations for improving mission support or for correcting problems encountered in the mission supported.

2.4.3.8 Ensure proper operation and maintenance of the TPS-63 radar at site D-3B in accordance with applicable technical data.

2.4.4 The Contractor shall support Government-approved test projects involving targets, scoring systems, and other related equipment within the capability of the Contractor. This support includes research and development testing, prototyping, TCTO verification and/or proofing, providing physical and technical support as required, and any other actions the Government directs. The Contractor shall be responsive to Government requests for project support within the Contractor's capabilities to fabricate or modify systems and provide technical advice and/or labor support in addition to actual target flights and scoring tasks. However, no modification shall be made without proper modification approval. In addition:

2.4.4.1 Work with other Air Force units, DOD agencies, and other Contractors in support of approved test projects. The Contractor shall assist these outside agencies as requested by the FC, GFR or LG.

2.4.4.2 Provide test support on a "non-interference-with the mission" basis at no increased cost to the Government.

2.4.4.3 Prepare engineering drawings, graphic aids, schematics, engineering analyses, tests, or draft procedures for inclusion with modification proposals.

2.4.4.4 Maintain system documentation records including historical records, engineering drawings, engineering change proposals, operations procedures, maintenance procedures, or theory of operations for all equipment, systems, or software for which the Contractor provides O&M or engineering support.

2.4.4.5 Provide all sample rate printout, plotting rate display or any other product developed within the capability of the equipment utilized in this PWS to the Government upon request. The Contractor shall review recorded mission parameter data and scoring data and brief the results to the using test agency.

2.4.4.6 RESERVED

2.4.5 Range Control Facility Computer Operations. The Contractor shall operate the computers and peripheral devices in the Range Control Facility for mission support and for data reduction during the times specified by the Government elsewhere in this document. Operations include:

2.4.5.1 Initiation of computer operations by selection and loading of various operating systems and computer programs. Logically add/delete components of hardware based on need and availability.

2.4.5.2 Use console operator commands to monitor and control the computers and peripherals, add or delete software modules, assign peripheral components, observe or log job running characteristics, and enter diagnostic messages to computer users.

2.4.5.3 Configure the system according to mission requirements.

2.4.5.4 Identification and isolation of failures, failure modes, and logging of all errors encountered.

2.4.5.5 Documentation of computer operations according to the CDRL Item A-14 as specified in the contract.

2.4.5.6 Interrogate, quantify performance, and ascertain the level of readiness to support, and diagnose malfunctions in transponders located along the Gulf Coast in fixed or mobile locations. This interrogation shall be accomplished with the Data Link Subsystem Test Set.

2.4.5.7 Provide operators knowledgeable in the functions, operations, characteristics, limitations, and configuration relationships of each system.

2.4.6 Gulf Range Video System (Tyndall AFB). The Contractor shall maintain the video equipment listed in this PWS. The Contractor shall provide operation and maintenance for the 400 series items in the GFP list. The Contractor shall comply with applicable Air Force regulations to account for the system equipment. Equipment locations include buildings 503, 226, 1801, 1277, 849, 9310, droneway, and subscale launch pad on base and several antenna sites. The Contractor shall support all operational requirements directed by the Government. Operations shall include the following:

2.4.6.1 Provide live audio/video of full-scale/subscale launches to the drone controller at buildings 1277 and 1801, and the debriefing video system, building 226.

2.4.6.2 Operate the video debriefing system in building 226 when mission requirements dictate or as directed by the Government.

2.4.6.3 Configure system according to mission requirements to include audio/video recording, video/sound dubbing, and addition of special effects (i.e. adding letters to video, fade in/out, etc.)

2.4.6.4 Identify and isolate system malfunctions for maintenance, then repair the malfunctions.

2.4.6.5 Inventory and control audio/video equipment in accordance with applicable Air Force regulations/instructions.

2.4.6.6 Provide operators knowledgeable in the functions, operations, and configuration relationships of the Gulf Range Video System (Tyndall AFB). The operators shall be capable of maintaining a moving target within the field of view of the camera during the video collection phase while the camera lens zooms to fill the field of view with the moving target.

2.4.6.7 Support other Government agencies in operations of the video system for special taskings (e.g., base productions with Public Affairs, William Tell coverage, etc.).

2.4.6.8 Maintain user manuals, necessary consumable supplies (i.e. head cleaners and tapes) and audio/video library in the systems' studio.

2.4.6.9 Provide audio/video tape reproductions as requested by the Government.

2.4.6.10 Maintain operational/maintenance log of all actions taken in the studio.

2.4.6.11 Provide video purchase consultation service to a requesting government agency when tasked by the WEG. The consultation intent is to maintain a standard of compatibility with currently utilized equipment. This service shall consist of recommending equipment purchases to the government and reviewing proposed equipment purchases to ensure compatibility.

2.4.7 The Contractor shall document all preventive and corrective maintenance actions. The documentation shall include the type of maintenance performed, number of man-hours expended, the make, model, and serial/ID number of the equipment repaired, the date of repair, and the individual performing the repair action. The Contractor may use the capabilities of the GFE computers for documenting this information as long as this effort does not interfere with other WEG functions.

2.4.8 The Contractor shall prepare and implement preventive maintenance procedures for Communications-Electronics equipment if no Air Force technical order or standard USAF work cards. Use standard work cards if they exist.

2.4.9 Upon expiration of this contract, or any option period, which the Government elects not to exercise the next option, the in-coming contractor shall account for any recognized equipment deficiencies as part of the inventory of government-furnished equipment at contract changeover.

2.4.10 The Contractor shall remove, relocate, and reinstall hardware and software as needed in accordance with a tasking transmitted from the Government to the Contractor.

2.4.11 The Gulf Range Video System (Tyndall AFB) equipment shall normally be considered non-critical, but may change to critical during William Tell and other times when the Government directs.

2.4.12 The Contractor shall provide diagnostic procedures to determine the video system's mission readiness.

2.4.13 The Contractor shall support any configuration changes in the system which the Government approves.

2.4.14 The Contractor shall provide the capability to reproduce classified video recordings. The Government shall provide the approval for the security procedures that the Contractor shall follow. Classification shall be SECRET or lesser level.

2.4.15 UHF Flight Termination System.

2.4.15.1 The Contractor shall provide the necessary expertise to maintain the UHF Flight Termination system and associated equipment.

2.4.15.2 The Contractor shall perform organizational and intermediate level maintenance of the UHF Flight Termination system, the UHF Flight Termination interface for Eglin AFB Site D-3 in Bldg 1801, GMCS, and GRDCS II destruct interfaces within Bldgs 1801 and 1277.

2.4.16 Communications.

2.4.16.1 Gulf Range Microwave System (Tyndall AFB).

2.4.16.1.1 The Gulf Range Microwave System (Tyndall AFB) links the various telemetry sites of the 53 WEG and provides service to other users as capacity permits. Normally, the circuits and channels pass communications traffic in an unmanned passive mode after initial installation and checkout. The microwave system provides the capability to integrate the various technical facilities into any configuration to support the 53 WEG mission and other user requirements. It provides data and voice communications between the following Tyndall Range sites:

2.4.16.1.1.1 Tyndall Terminal Site (Bldg 1801).

2.4.16.1.1.2 Tyndall ACMI Site (Bldg 503).

2.4.16.1.1.3 D1C Repeater Site (Bldg 9401).

2.4.16.1.1.4 D3 Terminal Site (Bldg 9970).

2.4.16.1.1.5 Apalachicola Repeater Site (Bldg 9911).

2.4.16.1.1.6 Carrabelle Terminal Site (Van).

2.4.16.1.1.7 Tyndall GRDCS II Terminal Site (Bldg 1277).

2.4.16.1.1.8 D1C GRDCS II Terminal Site (Bldg 9401).

2.4.16.1.1.9 GRDCS II TV Video from Bldg 9310 to Bldg 1277.

2.4.16.1.1.10 D-3B Terminal Site (Eglin Bldg 9959 & AN/TPS-63).

2.4.16.1.1.11 St. Marks DLS (Non-Microwave).

2.4.16.1.1.12 Subscale Launch Facility.

2.4.16.1.1.13 AWCS Mobility and Simulation (AMS) Flight (Bldg 1282).

2.4.16.1.2 Fiber optic cable and terminal equipment supporting range communications includes video distribution units, video switchers, video monitors, multiplexers, channel banks, fiber distribution panels, power supplies, terminal blocks, circuit cards, cabling, fuses, filters, equipment shelves, equipment racks, DEC LAN bridges, and UPS. The equipment is installed at site D1C, full-scale, subscale, and buildings 156, 223, 224, 225, 226, 227, 503, 729, 1801, 1270, 1277, 1279, and 1282.

2.4.16.1.3 The Contractor shall maintain the GCI interfaces with ACMI radios. The contractor shall interface with the ACMI Contractor to troubleshoot all ACMI radio interface and microwave issues.

2.4.16.1.4 The 46th Test Wing/ Eglin O&M Contractor provide organizational and intermediate level maintenance support for the Gulf Range Microwave System (Tyndall AFB) equipment. The equipment consists of microwave radio transmitters and receivers, multiplexing equipment, terminal (conditioning) equipment (including SMTs and wideband shelves), antennas, waveguides, and T-1 land lines. Maintenance support includes preventive maintenance and equipment repairs.

2.4.16.1.5 The Contractor shall:

2.4.16.1.5.1 Provide technical services to advise/assist Eglin O & M Contractor personnel in the maintenance of the Range Microwave System.

2.4.16.1.5.2 Perform organizational and intermediate level maintenance on the Range Microwave System, in collateral support of the Eglin O&M Contractor. The Contractor shall have primary responsibility for maintaining the terminal equipment in Bldg 1801, and be responsible for its condition/operational status.

2.4.16.1.5.3 Accomplish new circuit/channel installations, cross-connects, and microwave assignments which the Range Microwave System configuration manager or alternate approves. This includes temporary installations to support tests and special projects.

2.4.16.1.5.4 Maintain configuration control records for the Range Microwave System to include microwave equipment, terminal equipment, circuit/channel records (including supervisory channels), and wiring/cabling diagrams.

2.4.16.1.5.5 Provide copies of circuit/channel assignment records to the Range Microwave System configuration manager. Provide change sheets for circuit/channel additions or deletions.

2.4.16.1.5.6 Provide technical services to advise/assist the Range Microwave System configuration manager in managing the present system, planning configuration changes, equipment modification, system upgrade, and equipment replacement.

2.4.16.1.5.7 Provide property accountability for terminal equipment in Bldg 1801, Gulf Range Microwave System (Tyndall AFB), and the Tyndall Range Video System.

2.4.16.1.5.8 Maintain the fiber optic communications equipment identified in this section.

2.4.16.1.5.9 Maintain and operate the Equipment Condition Monitoring System (MCS-11). The Contractor shall forward the MCS-11 radio fault information to the Eglin O&M Contractor personnel for necessary corrective actions. The Contractor shall document all MCS-11 maintenance actions and request system configuration changes through the Government.

2.4.16.1.5.10 Provide on-equipment maintenance and operate the HF down-link associated with receiving and relaying sea-surveillance data from the E-9A.

2.4.16.1.5.11 Provide trained and qualified tower climbers.

2.4.16.2 Target and Scoring Communications Network.

2.4.16.2.1 The Target and Scoring Communications Network provides voice communications for coordinating missions and maintenance activity. It includes UHF and VHF radios, intercoms, and hot lines. It consists of fixed stations, mobile stations and hand-held radios.

2.4.16.2.2 325th Communications Squadron (325 CS) provides intermediate level maintenance support for the Target and Scoring Communications Network. It does this through its maintenance branch and through separate contracts.

2.4.16.2.3 The Contractor shall:

2.4.16.2.3.1 Coordinate maintenance of the Target and Scoring Communications Network with the 325 CS, other Contractors, the local telephone company, and other users.

2.4.16.2.3.2 Perform organizational maintenance on the communications network, including replacement of assemblies, parts, and batteries.

2.4.16.2.3.3 Install communications network equipment on Contractor controlled assets, to include vehicle and host equipment modifications.

2.4.16.2.3.4 Control and schedule operational checks/tests of communications network equipment.

2.4.16.2.3.5 Obtain and document frequency clearances.

2.4.16.3 GRDCS II Maintenance Net.

2.4.16.3.1 The GRDCS II Maintenance Net is a non-tactical radio communications network centered around the Tyndall Trunking System. The system consists of numerous receivers installed in various sites, an encoder installed in building 1277 and multiple LMR radio transceivers. A dual tone multi-frequency (DTMF) encoder energizes/de-energizes the GRDCS II sites and ancillary equipment at various locations at Tyndall.

2.4.16.3.2 Another Contractor maintains the radios on an "on-call" basis through the 325 CS.

2.4.16.3.3 The Contractor shall operate the GRDCS II radio network on Tyndall as necessary for operations and maintenance.

2.4.16.3.4 The Contractor shall maintain the DTMF decoders at the transponder sites, the microwave interface chassis, and the DTMF encoder within Bldg 1277. They shall provide preventive maintenance checks on a routine, periodic basis for the entire system.

2.4.16.3.5 The Contractor shall assist the Government in the preparation of documents for acquiring additional frequencies, documenting usage of the existing frequencies and relocation of radio remote units when needed.

2.4.16.4 Video teleconferencing system.

2.4.16.4.1 The video teleconferencing system provides two-way audio and video between the 53 WEG at Tyndall and the 53d Wing at Eglin. This system may expand to connect other USAFAWC units.

2.4.16.4.2 The Contractor shall support video compression/ teleconferencing sessions as scheduled by the Government with a minimum of 18 hours notice. These sessions shall normally be scheduled during the 12-hour range day, Monday through Friday, excluding holidays. The Government may schedule sessions on Saturdays, Sundays or holidays to satisfy priority requirements. The Government shall not normally pay overtime for weekend sessions, and relies on the Contractor to schedule the work force to avoid an overtime situation.

2.4.16.4.3 The Contractor shall:

2.4.16.4.3.1 Reserved

2.4.16.4.3.2 Document and maintain system configuration and provide a copy of the documentation to the system configuration manager at the 53 TSS/TSSE.

2.4.16.4.3.3 Perform preventive maintenance and maintain the video compression and teleconferencing equipment located at Tyndall AFB.

2.4.16.4.3.4 Notify the Government if all or part of the system shall be inoperative for more than seven days.

2.4.16.4.3.5 Provide training to users (not more than 10 annually) in the operation of system units.

2.4.16.5 AMS System.

2.4.16.5.1 The AMS system is used to train Air Battle Managers and AWACS Weapons Directors. Currently the system uses 8 radio feeds from the Air Combat Maneuvering Instrumentation Facility in Building 503 and 8 radio feeds from the Ground to Air Transmitter Receivers site near Building 1277.

2.4.16.5.2 The Contractor shall perform organizational maintenance on the communication equipment identified herein.

2.4.16.6 The Contractor shall provide operation and maintenance for the 500 series communication equipment listed in the GFP installed at site D1C, full-scale, sub-scale, and buildings 156, 223, 224, 225, 226, 227, 503, 729, 1801, 1270, 1277, 1279, and 1282.

3 QUALITY

3.1 Quality Control. The Contractor shall develop, implement, and maintain a comprehensive quality control program that assures compliance with all requirements of this contract and associated task orders. Also see Section 1.2.3, Quality Management.

3.2 Quality Assurance. The Government shall evaluate the Contractor's performance under this contract. For those tasks listed in the Service Delivery Summary (SDS), the quality assurance evaluator (QAE) shall follow the methods of surveillance specified in the Government's quality assurance surveillance plan (QASP). Government personnel shall record all surveillance observations. When an observation indicates defective performance, the QAE shall require the contract/task order manager or representative to initial the observation. The initialing of the observation does not necessarily constitute concurrence with the observation, only acknowledgment that they have been made aware of the defective performance. Also see Section 1.2.4, Quality Assurance Program.

3.2.1 Implement and administer the MSEP and support other programs to include:

- a. Activity Inspections (if MAJCOM directed)
- b. Product Improvement Program (PIP)
- c. Deficiency Reporting (DR).
- d. Product Improvement Working Group (PIWG).
- e. R&M Working Groups.
- f. Aircraft and Equipment Impoundment Program IAW 53d WEG Guidance of this

instruction.

g. Weight and Balance (W&B) program.

h. Chafing Awareness Program.

4 ENVIRONMENTAL SAFETY AND HEALTH

4.1 Environmental Requirements. The Contractor shall comply with all applicable federal, state, and local environmental statutes, instructions, manuals, handbooks, regulations, guidance, policy letters, and rules (including all changes and amendments), and all Presidential Executive Orders, in effect on the date of issuance of each task order. The Contractor shall comply with the highest degree of environmental protection where any disagreements exist.

4.2 Safety and Health Requirements. The Contractor shall comply with all applicable Occupational Safety and Health Administration Standards (OSHA) and Air Force Occupational Safety and Health (AFOSH) Standards, safety book, technical orders, regulations, and referenced publications. The Contractor shall comply with the highest degree of safety protection where any disagreements exist.

4.2.1 The Contractor shall establish, manage, and administer an effective Flight, Explosive, and Ground Mishap Prevention Program in accordance with AF safety directives. The Contractor shall fully participate in all Host Base Safety Programs.

4.2.2 The Contractor shall participate and cooperate in mishap investigations conducted by the Government. Flight, explosive, and ground mishaps shall be investigated and reported in accordance with AFI 91-204. The Contractor shall provide assistance to the investigation board as required. The Contractor may be tasked to assign personnel to mishap investigation boards. In this case, assigned Contractor employees shall remain assigned to the board until the board is complete or their services are not longer required. The Mishap Investigation Board President shall make the decision on when the board is complete. Immediately following an actual or suspected mishap, all aircraft/drone maintenance records, flight logs, and other applicable documents shall be impounded by the CQAE/LG/GFR for investigation. The Contractor shall provide pre-mission and crash procedures in accordance with AFJI 10-220.

4.2.2 NOTE: The USAF Safety Inspection Program does not replace internal safety surveillance by the Contractor or inspections required by other federal or state agencies. The Contractor shall:

4.2.2.1 Cooperate with Safety personnel in conducting formal detailed safety inspections and unannounced spot safety inspections of all Contractor activities.

4.2.2.2 Provide the Government initial written replies within the suspense date of the safety inspection report dates concerning actions taken. The Contractor shall submit follow-up reports every 30 days until all discrepancies are corrected.

4.2.2.3 Route all inspection reports (Contractor and Government generated), replies, and related correspondence through the CQAE.

4.2.2.4 Respond to all applicable ALSAFECOM and ALMAJCOM special safety interest item correspondence. When ALSAFECOM directs actions applicable to the Contractor's tasks as outlined in this PWS and referenced publications thereof, the Contractor shall comply and route any required replies through the CQAE, GFR and LG.

4.2.2.5 Satisfy the appropriate safety requirements prescribed in AFJI 10-220 (Contractor's civilian aircrew).

4.2.2.6 Attend safety meetings as directed by the GFR at each operating location.

4.2.2.7 Stay current and accountable for items in the Flight Crew Information File (FCIF).

4.2.2.8 Conduct flight safety meetings IAW AFJI 10-220.

SECTION B**SERVICE DELIVERY SUMMARY**

Note: for the purposes of measuring performance, performance periods shall be semi-annual (6 months).

PERFORMANCE OBJECTIVE	PERFORMANCE MEASURE
(1) Develop and submit all required deliverables in a timely, properly formatted manner.	Submits deliverables IAW CDRLs 95% of the time.
(2) Operate and maintain FSATs to support success of scheduled missions.	Prepare, launch and successfully fly 95% of all properly scheduled FSAT missions.
(3) Operate and maintains SSATs to support success of scheduled missions.	Prepare, launch and successfully fly 95% of all properly scheduled SSAT missions.
(4) Maintain a stable workforce.	Keep the same personnel working such that the need for the Government to expend time/money/effort to train and orient new Contractor personnel is minimized. The Contractor's turnover rate is only 5% (total number of personnel assigned over number of personnel replaced or moved without Government direction)
(5) Have a pro-active, comprehensive Quality Assurance Program.	Employ full-time QA personnel who work no additional duties.
(6) Maintain air surveillance radar in a serviceable manner.	Air surveillance radar shall have FMC rate of 95%.
(7) Maintain GRDCS II to support (a) target control and tracking (b) participant tracking (c) flight termination (d) engineering/programming investigations	GRDCS II shall be operational to support 100% of (a) target control and tracking (b) participant tracking (c) flight termination (d) engineering/programming investigations
(8) Maintain MCS van in a serviceable manner.	MCS van shall maintain FMC rate of 99%.
(9) Maintain AMS communications equipment in a serviceable manner.	75% of GATR equipment available for use 95% of the time. ALSO 75% of ACMI radios available for use 95% of the time.
(10) Maintain SE in a serviceable manner.	SE availability shall be 90%.
(11) Maintain GOVs IAW government publications.	GOVs shall maintain MC rate of 90%. There shall be 0 cases of vehicle abuse.
(12) Maintain teleconferencing equipment in a serviceable manner.	Teleconferencing equipment shall be available for scheduled meetings 95% of the time.
(13) Repair TM equipment in a timely manner.	Repair TM equipment within 30 days 80% of the time.

SECTION C**GOVERNMENT FURNISHED PROPERTY, SERVICES, AND FACILITIES**

1 GENERAL INFORMATION: The Contractor shall ensure accurate control and accountability of all Government furnished property in accordance with procedures the Government Property clauses incorporated into this solicitation and the Model Contract. Other than that GFP listed below, specific services and property to be provided the Contractor shall be identified in each Task Order.

2 GOVERNMENT FURNISHED EQUIPMENT/PROPERTY:

2.1 The Contractor shall provide all equipment required in this PWS that is not specified as Government furnished in Section C, Government Furnished Property and Services and Facilities.

2.2 Except as otherwise specified herein, the Government shall provide the targets, scoring systems, control systems, components, and associated equipment; necessary facilities and utilities, offices, sanitary facilities, maintenance areas, storage areas, operations areas, spare parts, materials, assemblies, special tools, support equipment, and ground handling equipment.

2.3 Unless otherwise specified in a particular task order, the Government shall provide, as a minimum, the following equipment or office space to any on-site Contractor employee:

<u>Description</u>	<u>Quantity</u>
Work space (desk, chair)	1 for each on-site person Determined by the Contractor to require workspace.
Access to a copy machine	1 or more
Access to a facsimile machine	1 or more
Telephone, including long distance and voice mail	1 for each on-site person Determined by the Contractor to require telephone.
Desk top computer	1 for each location using each Government-provided data system (i.e., CAMS, SBSS, ATIMS, etc.)

2.4 Unless otherwise specified, the Contractor(s), with a valid National Agency Check verified through the Automated Security Clearance Approval Systems (ASCAS) roster of validation from the Contractor's security manager, shall be provided access to the hosting bases' unclassified computer network. This includes its inherent capabilities including, but not limited to: Internet access, electronic mail, file and print services, and dial-in network access. The Contractor shall be aware of and abide with all Government regulations concerning the authorized use of the

Government's computer network including the restriction against using the network to recruit personnel or advertise job openings.

2.5 Powered AGE. The Contractor shall provide the following support on powered AGE:

- 2.5.1** Servicing inspections prior to initial daily use of assigned powered AGE to include documentation of appropriate forms.
- 2.5.2** Service AGE upon return to the Contractor's sub-pool.
- 2.5.3** Ensure cleanliness of dispatched units.
- 2.5.4** Perform operational checks on equipment as required by applicable inspection work cards.
- 2.5.5** Pick up and deliver all powered AGE in support of Contractor's requirements.
- 2.5.6** Contact the host base Chief of Maintenance/Maintenance Control for specialist assistance and shop repairs on powered AGE.
- 2.5.7** Treat minor corrosion on AGE.
- 2.5.8** Perform periodic inspections, organizational, and intermediate maintenance, (at HAFB).

2.6 Non-powered AGE. The Contractor shall perform organizational and intermediate-level maintenance on non-powered AGE.

2.7 The following list is not an inventory control document; but is representative of the complexity of operations and maintenance requirements. Although considerable effort was expended toward making the list accurate, there might be errors. Therefore, the Contractor or prospective Contractor is encouraged to examine the equipment during the bidding period to ensure the accuracy of the list.

2.7.1 TELEMETRY EQUIPMENT

MODEL	NOMENCLATURE	QUANTITY
100	EMR 720	6
101	Reserved	
102	Reserved	
103	Reserved	
104	Reserved	6
105	EMR 8350	
106	EMR 410	1
107	Reserved	
	PCM BIT SYNCHRONIZER	
	PCM WORD SELECTOR	
	PROGRAMMABLE DISCRIMINATOR	

108	Acroamatics 2410	PAM SYNCHRONIZER	1
109	Reserved		
110	Reserved		
111	Reserved		
112	Reserved		
113	Reserved		
114	Reserved		
115	MICRODYNE	3200 DIVERSITY COMBINER	10
116	M5-DCO50	TOPAZ POWER CENTER	1
117	RACAL	STOREHOUSE RECORDER	4
118	RACAL	STOREPLEX RECORDER	3
119	DSP 5500	KAY ELEMETRICS SONO-GRAPH	2
120	DSP 5510	KAY ELEMETRICS PRINTER	2

2.7.2 BLDG 1801 DATA ANALYSIS EQUIPMENT

121	Reserved		
122	Reserved		
123	Reserved		
124	SCHLBRG EMR760	BUFFERED DATA CHANNEL	7
125	Reserved		
126	Reserved		
127	Reserved		
128	Reserved		
129	Reserved		
130	Reserved		
131	Reserved		
132	Reserved		
133	Reserved		
134	Reserved		
135		DIGITAL PORT SHARING DEVICE CODEX PRODUCT CODE 47050 (BLDG 1282)	
136	DSP 5519	IEEE INTERFACE	1

2.7.3 RCS EQUIPMENT

200	A26-AA	Sun Enterprise 250 server	3
201	1191A	300MHz SPARC	18
202	2600A	250 MHz SPARC	2
203	7004A	256MB	8
204	5214A	4.2 GB Disk Drive	10
205	6213A	Tape Drive 25GB	4
206		CD Rom	4
207	E3000	Sun Enterprise 3000 server	1
208	X7121A	Sun 19.8" display	4
209	3660A	PGX Color Frame Buffer	4

210	S110	Panasonic 21" Display	14
211	S21	Panasonic 21" Display	9
212	445M	Nokia 21" Display	3
213	XP400	Tektronix X Terminal w kb, Mouse & monitor	1
214	XP330	Tektronix X Terminal w/keyboard & mouse	37
215	UV 1095-EV,U	TAXAN Ultravision 1095 Monitor	13
216	OPUS 220	ASCII terminals	2
217	49652-MF	19" Communications Rack	1
218	3C39036	3Com Super Stack II	2
219	DS-01	General Data Comm Modem Cage	3
220	MPS600	Uconix CD2 com server	2
221	38-P13082-93	Electrohome MARQUEE 8000 Data Graphics	
		Projectors	2
222	QMS-860-1	QMS-860 Laser Printer	2
223	SC 1275	Lexmark Optra color laser Printer	1
224	LE6517A	Black Box 16p media converter chassis	2
225	PLC-EF10N	Sanyo large media Projector	1
226	PLC-NNS09	Sanyo wide angle lens	1
227	LE6504C	10BaseT to ThinNet Card	16
228	TS2100	Datum time server /IRIG	2
229	2540	Codex Modem	1
230	Disk Drive	Internal 424MB	1
231	6005A	Floppy Disk Drive 2MB 3.5"	4
232	P-0027	Audio card PCI	3
233	20-050-0027	Anartes audio board	3
234	0422	Ethernet Cables (2,170' total)	50
235	AMAF125	Serial Cables (572' total)	24
236	H7224-AC	Power Distribution System 50KVA	1
237	BEA 93-710	Console Assembly (excluding OJ-314)	14
238	RMC-117P2X	Aptm PC station CPU	1
239	RMM-322/B	Aptm PC station LCD, keyboard & mouse	1
240	AN/TPS-63	Radar (Eglin Site D-3B)	1
241	S110I	Panasonic 21" Display	5
242	AG-460	PANASONIC VIDEO CAMERA	4
243	DRAKE R&B	Reciever	3
244	BR COM 6078	TIME DIVERSITY MODEM	3
245	TCI 612-2	LOOP ANTENNA SYSTEM	1
246	VIDEO SCAN CONVTR	1500 RGB CONVERTER	5
247	SCAN CONVERTER	FOLSOM SCAN CONVERTER	2
248	EXTRON MODEL 8	SWITCHERS	5
249	EXTRON VIDEO LINK	VIDEO LINK BOXES	12
250	VTRS	SONY HI-8mm	5
251	MONITOR	SONY 10"	1
252	MONITOR	PANASONIC 10"	1
253	TV	HITACHI 27"	1
254	101587	Scan Do Ultra Converter	3

255	RS16X8 RGB	Knox Routing switcher	1
256	EV-C200	SONY HI-8mm recorder	3
257	RM304A	Video System Rack	2
258	6091-019	IBM GRAPHICS COLOR DISPLAY	1
259	7013-540	IBM MICROCOMPUTER SYSTEM	1
260	DCP-4802	Cray Frame Relay	2
261	WV-CL830	Panasonic video Camera	1
262	DE-3 2020	MODEMS (BLDG 1277 & J11 site)	8
263		Raids RADAR Test Set	2
264	DE-3 201-7	MODEMS	6

2.7.4 GRDCS II

300	4066-15209	BLACK BOX TERMINAL SERVER	1
301	4039-10R	IBM LEXMARK LASER PRINTER	1
302	4039-16L	IBM LEXMARK LASER PRINTER	1
303	3151-41	IBM ASCII TERMINAL	4
304	6094-020	IBM LTD PGM FUNCTION KEY PAD	8
305	7013-520	IBM MICROCOMPUTER SYSTEM	2
306	7013-590	IBM MICROCOMPUTER SYSTEM	2
307	6091-019	IBM GRAPHICS COLOR DISPLAY	16
308	7012-34H	IBM WORKSTATION	16
309	881DA-2N	GPS STATION CLOCK	2
310		PLOTTER/Strip Chart	2
311	LFS-46-28	POWER SUPPLY	2
312	H7224-AC	POWER DISTRIBUTION SYSTEM 50KVA	1
313	4591-50	CABLE ASSY	6
314	IBM DLS	DATA LINK TRANSPONDERS	80
315	XXXX	GROUND STATIONS	16
316	3250	EXIDE 250 KW, 313 KVA UPS	1
317	RS6000	GMCS VAN COMPUTER (Includes Holloman)	2
318	XXXX	TV TRANS AND RECEPTION SYSTEM (BLDG 9310 TO BLDG 1277)	1
319	XXXX	DTMF REMOTE CONTROL SYSTEM (W/2 ENCODERS AND MULTIPLE DECODERS)	1
320	81C436	DIESEL POWERED CHECKOUT350 VAN W/AC GEN.	1
321	LA50-RA	100 CPS PERSONAL PRINTER	5
322	Ohio solutions	PC Destruct recorder/io board	1
323		DLS ISC Interface	4
324		High Speed interface	4
325	DEREP-AA	REMOTE ETHERNET REPEATER	2
326	VT320-AA	TERMINAL	4
327	2510	PHOTOCOPIER (XEROX)	1
328	UNK	LEASED COPIER	1
329		DATA LINK SUBSYSTEM TEST SET	8

330		DATA LINK SUBSYSTEM TEST SET (MOBILE)	1
331	SC 1275	Lexmark Optra color laser Printer	1
332	P-4 POD	GRDCS II TRACKING POD	15
333	TEST SET	GRDCS II TRACKING POD TEST SET	1
334	HARD DISK	2GB for 7013-590	1
335	ADAPTER	TOKEN RING for 7013-590	1
336	CARD	ETHERNET for 7013-590	1
337	HARD DISK	670 MB for 7013-520	1
338	ADAPTER	TOKEN RING for 7013-520	1
339	DISK	540 MB for 7012-34H	2
340	ADAPTER	TOKEN RING for 7012-34H	1
341	BOARD, SERIAL	P/N 32G1257 (for IBM RISC 6000 Model 520)	2
342		GRDCS Console Assembly (excluding OJ-314)	8
343	NavSymm XR5	GPS Reference receiver	1
344	09101	WIND MONITOR SYSTEM	2
345		915MHz RECEIVER	3
346	FOLSOM RESEARCH	HIGH RESOLUTION RGB TO NTSC CONVERTER 8708	2

2.7.5 GULF RANGE VIDEO SYSTEMS

400	WINSTEAD INC 5 RAY	STANDARD SWITCHING EQUIP CONSOLES	1
401	TR-500	Sony HI-8 mm Camcorder	1
402	SONY VO-5800	3/4" VCR	1
403	3M D-6000	TITLER/CHARACTOR GEN (PANTHER)	1
404	3M MM-1200	DIGITIZER PAD BOARD/PEN	1
405	SIGMA SYSTEM 500	10in. 60 out VIDEO DISTRIBUTION AMPLIFIER	3
406	EV-C200	Sony 8mm/Hi-8mm Recorder/Player	4
407	EV-C100	Sony HI-8 mm Recorder/Player	1
408	SCOTT DD65630	WATT AM/FM STEREO RECEIVER	1
409	SCOTT SP-28	8 OHMS 25 WATT 2 WAY BOOKSHELF SPEAKER	2
410	ADM RM-1083	8in. X 3 out STEREO AUDIO MIXER	1
411	AG-DS-850	Panasonic S-VHS 1/2" Recorder	1
412	BT-S901Y	Panasonic Video Monitor, 9in.	15
413	PANASONIC CT-1030M	10" COLOR VIDEO MONITOR	9
414	SONY PVM-2530B	25" COLOR VIDEO MONITOR	1
415	AG-DS-840	Panasonic S-VHS 1/2" Player	1
416	AA COM 64205-V	S-BAND VIDEO TRANSMITTER (20 WATT)	5
417	AA COM AR-4000-5	S-BAND DUAL CHANNEL VIDEO RECEIVER	2
418	VIVCON IND V353	VARIABLE SPEED PAN & TILT DRIVE	2
		APTIV (12 ⁰ +24 ⁰ ps)	
419	VO-5800	3/4" Sony VCR	1

420	AG-1730	½" Panasonic VCR	2
421	EVO-520	8mm Sony VCR	2
422	TR-910	Sony HI-8 mm Camcorder	1
423	AG-DP800	Panasonic S-VHS Camcorder	1
424	AJ-D200	Panasonic DVCPRO Camcorder	2
425	AG-EZ1	Panasonic Digital Camcorder	3
426		PeterLisand Tripod	1
427	Pro930	Bilora Tripod	1
428		Nrg Light Kit	1
429	CS-220R	Premier Video Receiver	1
430	CS-220T	Premier Video Transmitter	1
431	VS-15E11	Video Switcher	1
432	VDA-4	Burst Video Distribution Amp	1
433		50V Kramer Video Distribution Amp	1
434	WJ-410	Panasonic Video Distribution Amp	1
435	RX8X2	Ross Audio Mixer	1
436	32-1200B	Radio Shack Audio Mixer	3
437	WR-DA7	Panasonic Audio Mixer	1
438	SR22	Samson Wireless Microphone	1
439	ES-1200C	Epson Scanner	1
440	AG- EP60	Panasonic Video Printer	1
441	UP-7200	Sony Video Printer	1
442	AG-LD30	Panasonic CD Player	1
443	4700	White Equalizer	1
444	AG-A800	Panasonic S-VHS Editing Controller	1
445	Winsted, Inc.	5 Bay Equipment Console.	1
446	Amiga 2000	Video Toaster System	1
447	Amiga 4000	Video Toaster System	1
448		Gateway 133MHZ Computer Graphics System	1
449		Scan Do Pro Computer to Video Converter	1
450	40-A2	Dorrough Loudness Monitor	1
451	WJ-MX50	Panasonic Digital AV Mixer	1
452	AR4000	AACOM S-Band Receiver	1
453	PVM-411	Sony Video Monitor	1
454	6228B	HP Dual DC Power Supply	1
455	WJ-410	Panasonic Quad Unit	1
456	DA-1000	Channel Plus Video Amp	4
457	ABC800H	Anton Bauer battery charger	3
458	P5-133	Gateway Computer System	2
459		HP Color Laserjet 5 Printer	1
460		HP Laserjet 4 Printer	1
461	842C	HP Deskjet Printer	1
462		Multi-Tech 19.2BPS Modem	1

2.7.6 COMMUNICATIONS

501	AT-197	UHF ANTENNA	2
502	TERRACOM TCM-604F	MICROWAVE TRANSMITTER	10
503	ANDREWS PA4-71	MICROWAVE ANTENNA	7
504	NARDA CORP.	8 MHZ FEED HORN	4
505	AE99F-1	MCS-11 MASTER STATION	1
506	AE99E	MCS-11 REMOTE STATION SUBSYSTEM	2
507	648-2200-001	MCS-11 MONITOR CONTROL SHELF	8
508	650-4405-001	MCS-11 MONITOR & CONTROL SHELF	2
509	5935 PBAY 532-2	TELLABS 532-2 32 PORT	3
510	5935 PBAY 532-4	TELLABS 532-4 96 PORT	1
511	5820 P360 D4	360 D4 CHANNEL BANK	10
512	828AF	TELCO	9
513	GPT261	VIDEO COMPRESSION SYSTEM	1
514	CANOCA-PERKINS	T1 DATA MULTIPLEXER	16
515	OPTELECOM	5000G T1 INTERFACE	22
516	OPTELECOM 5000GG	VIDEO INTERFACE	22
517	SERIES 500	SIGMA VIDEO AMPS	10
518	3.1 KVA	BEST UPS	6
519	7 KVA	BEST UPS	7
520	6030-P3257TS	OPTELECOM VIDEO TRANSMITTER	28
521	6030-P3257RS	OPTELECOM VIDEO RECEIVER	28
522	TSM 1000	Computer Monitoring System	1
523	SAV 210	Video Switcher	5
524	13 INCH	Video Monitor	6
525	10 INCH	Video Monitor	4
526	448	Alcatel	14
527	DEC-LAN	Bridges	2
528	MPC-2	CONVERTER NEST	2
529	DA-9	CONVERTER RS422>232	12
530	DA-9/CM	CONVERTER RS422>232	12
531	3261	MOTORLA MODEM V.34	12
532	3263	MOTORLA MODEM V.34	12
533	8042	MOTORLA 21 CARD NEST	12
534	CS-2300/RMEC1	CSTI REMOTE CONTROL UNIT	1
535	CS-2300/RCU	CSTI CONTROL UNIT	4
536	2400 etc/e	ATI TECHNOLOGIES MODEM	4
537	H-2/4	DATAPROBE 4-WIRE HYBRID	4
538	5631-L1-ST	OPTELECOM FIBER T-1 MODULE	60
539	5031/4C	OPTELECOM POWER SUPPLY	26
540	TLC5500R1	COMMUNICATION SHOUTDOWN BOX	10
541	TLC5500	COMMUNICATION SHOUTDOWN BOX	4
542	TERRACOM TCM-604F	MICROWAVE RECEIVER	10

2.7.7 RCF COMM-DIC, D-3,CARR, GATR, 1801

601	CS2300/DRV-GRC	GRC DRIVER KIT REV A LONGARM	11
602	420	PLUG PHONE 1/4" 2-COND MIL TYPE	1
603	GFE	WORKSTATION	3
604	20072213-001	RACK ASSY, TYNDALL REV A	1
605	20071935-001	ASSY POSN, ACCESSPT REV B 10.4 DISPLAY	47
606	200722150-001	JACKBOX ASSY, FNT MT REV A	45
607	BC00702	CA ASSY, DB25M, SHLD, MOLDED 6 FT	45
608	SHS-1658-01	HEADSET, STEREO, W/PTT AMP	28
609	H51N	HEADSET, SUPRA MONAURAL, NOISE CANCELLING	16
610	SHS-2162-15	HDST IF CABLE/AMP W/PTT 6 WIRE W/415 JACK	16
611	EVNSL60-0015	CABLE ASSY CAT 5, RJ-45 15 FT	46
612	ENVSL60-0030	CABLE ASSY CAT 5, RJ-45 30 FT	17
613	ENVSL60-0045	CABLE ASSY CAT 5, RJ-45 45 FT	29
614	20071554-001	PATCH PNL, MODIFIED REV B RJ45 TO 50 PIN TELCO	6
615	420	PLUG PHONE 1/4" 2-COND MIL TYPE	45
616	20071268-L600	CA ASSY, 50M TO 50M REV A 600 IN	6
617	20072185-001	CBL ASSY, GRC-171/V1 REV A CONTROL 72 INCHES	5
618	20072390-001	PTCH PNL, RJ11 TO 50 REV A PIN TELCO MODIFIED	20
619	EVNSL50A-0500	CABLE 25 PR-SLD, 24AWG, CAT5 UTP, 500', 100MHZ	3
620	20071996-L072	CABLE ASSY, 78M-50M REV A 72 INCH	5
621	CS2300/LAENG-WS	SOFTWARE, WKSTA.ENG, REV A LONGARM	2
622	20072212-001	SPARES LIST, REV A TYNDALL	1
623	U-336S	MODEM, LEASED LINE	8
624	CISCO2611	ROUTER DUAL ETHERNET	1
625	NMS-4A/S	SERIAL NETWORK MODULE	1
626	20072330-001	NICELOG DIGITAL VOICE RECORDER	1
627	520-195-003	KVM SWITCH FOR ACCESSNET	1
628	20072290-001	COMPUTER ASSY REV B RCU	3
629	20072185-001	CBL ASSY, GRC-171/V1 REV A CONTROL 72 INCHES	3
630	20071266-001	CBL ASSY REV B GRC-171 V4 AUDIO	12
631	20071265-001	CBL ASSY REV B GRC-171 V4 CONTROL 6 FT	14
632	CS2300/GRCIU	LONGARM GRC IF UNIT REV A	8
633	20071936-L540	CBL ASSY, RJ11 TO REV A RE11, USOC, 540 INCHES	3